

Een onderzoek naar
DE AANSLIBBING VAN DE HAVEN VAN COLIJNSPLAAT

bijlage

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C.C.O.N. Granneman

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Vakgroep Kustwaterbouwkunde

Een onderzoek naar

DE AANSLIBBING VAN DE HAVEN VAN COLIJNSPLAAT

bijlagen

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Onder begeleiding van: Prof.dr.ir. E.W. Bijker

Delft, april 1984.

INHOUDSOPGAVE

BIJLAGE I Sedimentconcentratiemetingen

BIJLAGE II Stroombeelden in het model

BIJLAGE III Stroommetingen in het model

BIJLAGE IV Golfdoordringing

BIJLAGE I

SEDIMENTCONCENTRATIEMETINGEN

01

02

9 → 3 → 6

02

3-6
4
5
6
7
8
1
2

- 1 juni 1983
- 21 november 1983
- 1 december 1983

HAVEN (1980)

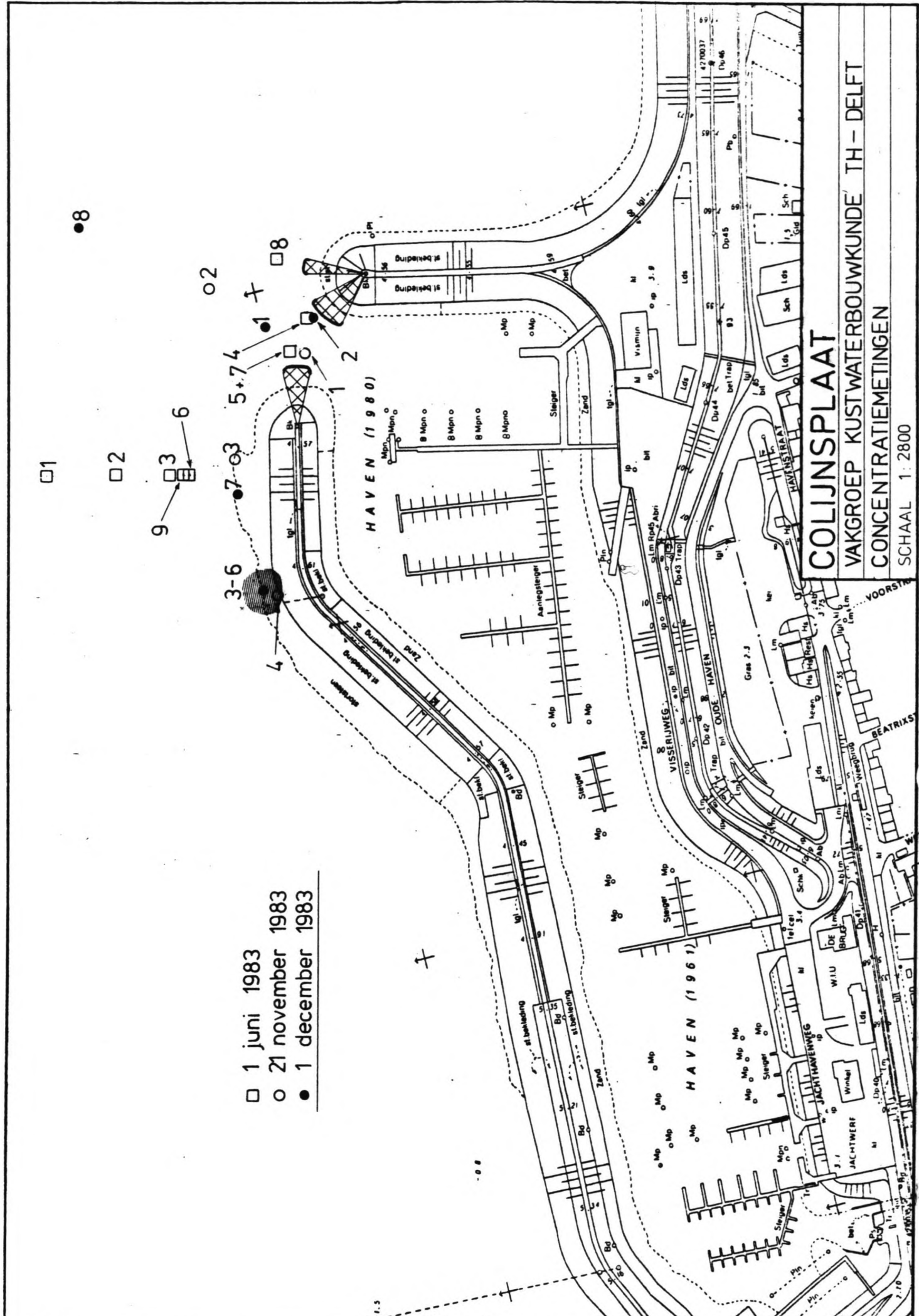
HAVEN (1961)

COLIJNSPLAAT

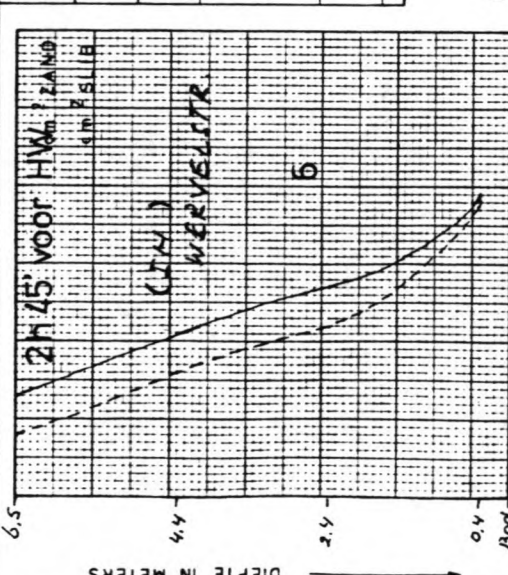
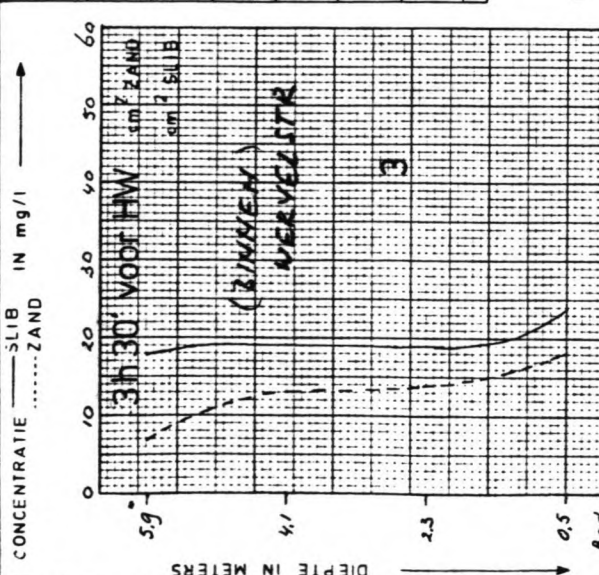
VAKGROEP KUSTWATERBOUWKUNDE TH - DELFT
 CONCENTRATIEMETINGEN

SCHAAL 1:2800

FIGUUR I.1



STROOMSNELHEDEN (GEINTERPOLEERD)		CONCENTRATIES : SLIB (< 50 µ) EN ZAND (> 50 µ) IN MG/L, CHLORIDE IN ‰				TRANSPORT SLIB (< 50 µ) EN ZAND (> 50 µ) IN MG.M/I.S.M.					
MET	HOOGTE • BOD IN m	RICHTING IN m/s	SNELHEID IN m/s	MONSTER NO	MET. HOOGTE • BOD IN m	HOOGTE SLIB (< 50 µ)	ZAND (> 50 µ)	CHLORIDE	TRANSPORT SLIB IN mg m ⁻¹ s ⁻¹	ZAND IN mg m ⁻¹ s ⁻¹	
	15.00	0.5	0.5	93	15.00	0.5	18	15.768			
	15.01	2.3	0.41	94	15.01	2.3	14	15.604			
	15.06	4.1	0.45	95	15.06	4.1	13	15.726			
	15.09	0.9	0.46	96	15.09	0.9	7	15.747			
BODEMDIEPTE = 6.4 m		v = m/s		c SLIB = 19.5 mg/l		ZAND = 13 m		BODEMDIEPTE = 6.4 m		TRANSPORT SLIB = mg m ⁻¹ s ⁻¹	
	15.50	0.4	0.54	97	15.50	0.4	38	15.768			
	15.53	2.4	0.54	98	15.53	2.4	22	15.754			
	15.56	4.4	0.50	99	15.56	4.4	16	15.795			
	15.59	6.5	0.63	100	15.59	6.5	0	15.809			
BODEMDIEPTE = 7.0 m		v = m/s		c SLIB = 24 mg/l		ZAND = 19.5 m		BODEMDIEPTE = 7.0 m		TRANSPORT SLIB = mg m ⁻¹ s ⁻¹	



RIJKSWATERSTAAT
DIRECTIE WATERHOUWING EN WATERBEWEGING
DISTRICT KUST EN ZEE - ADVIESDIENST VLISSINGEN

PLAATS: *Colijnsplaat*
RAAI :
 EB VLOED

MEETPUNT: 3 en 6
DATUM : 1 juni 1983

MATERIAALTRANSPORT

IN 3 BLADEN - BLAD 2
CODE *V8300A00*
A1 77.633

Glor

FIGUUR I.3

CONCENTRATIES : SLIB (< 50 μ) EN ZAND (> 50 μ) IN MG/L, CHLORIDE IN ‰

STROOMSNELHEDEN (GEINTERPOLEERD)	MET HOOGTE • BOD IN m	RICHTING IN m/s	SNELHEID IN m/s	MON-STER NO	MET. HOOGTE • BOD IN m	SLIB (< 50 μ)	ZAND (> 50 μ)	CHLORIDE
				73	15.10 0.5	32	22	15.712
				74	15.13 1.2	29	18	15.726
				75	15.16 1.9	28	16	15.705
				76	15.19 2.5	25	17	15.733

CONCENTRATIE SLIB (< 50 μ) IN mg/l

DEPTIE IN METERS

CONCENTRATIE ZAND (> 50 μ) IN mg/l

DEPTIE IN METERS

\bar{c} SLIB = 28.5 mg/l
 \bar{c} ZAND = 18 m
 BODEMDIEPTE = 3.0 m

STROOMSNELHEDEN (GEINTERPOLEERD)	MET HOOGTE • BOD IN m	RICHTING IN m/s	SNELHEID IN m/s	MON-STER NO	MET. HOOGTE • BOD IN m	SLIB (< 50 μ)	ZAND (> 50 μ)	CHLORIDE
				77	15.20 0.5	48	40	15.691
				78	15.23 1.5	36	30	15.712
				79	15.26 2.4	38	30	15.754
				80	15.29 3.4	35	27	15.740

CONCENTRATIE SLIB (< 50 μ) IN mg/l

DEPTIE IN METERS

CONCENTRATIE ZAND (> 50 μ) IN mg/l

DEPTIE IN METERS

\bar{c} SLIB = 38 mg/l
 \bar{c} ZAND = 30.5 m
 BODEMDIEPTE = 3.9 m

TRANSPORT SLIB (< 50 μ) EN ZAND (> 50 μ) IN mg m/l s m
 TRANSPORT SLIB = _____ mg m/l s m
 TRANSPORT ZAND = _____ mg m/l s m

TRANSPORT SLIB (< 50 μ) EN ZAND (> 50 μ) IN mg m/l s m
 TRANSPORT SLIB = _____ mg m/l s m
 TRANSPORT ZAND = _____ mg m/l s m

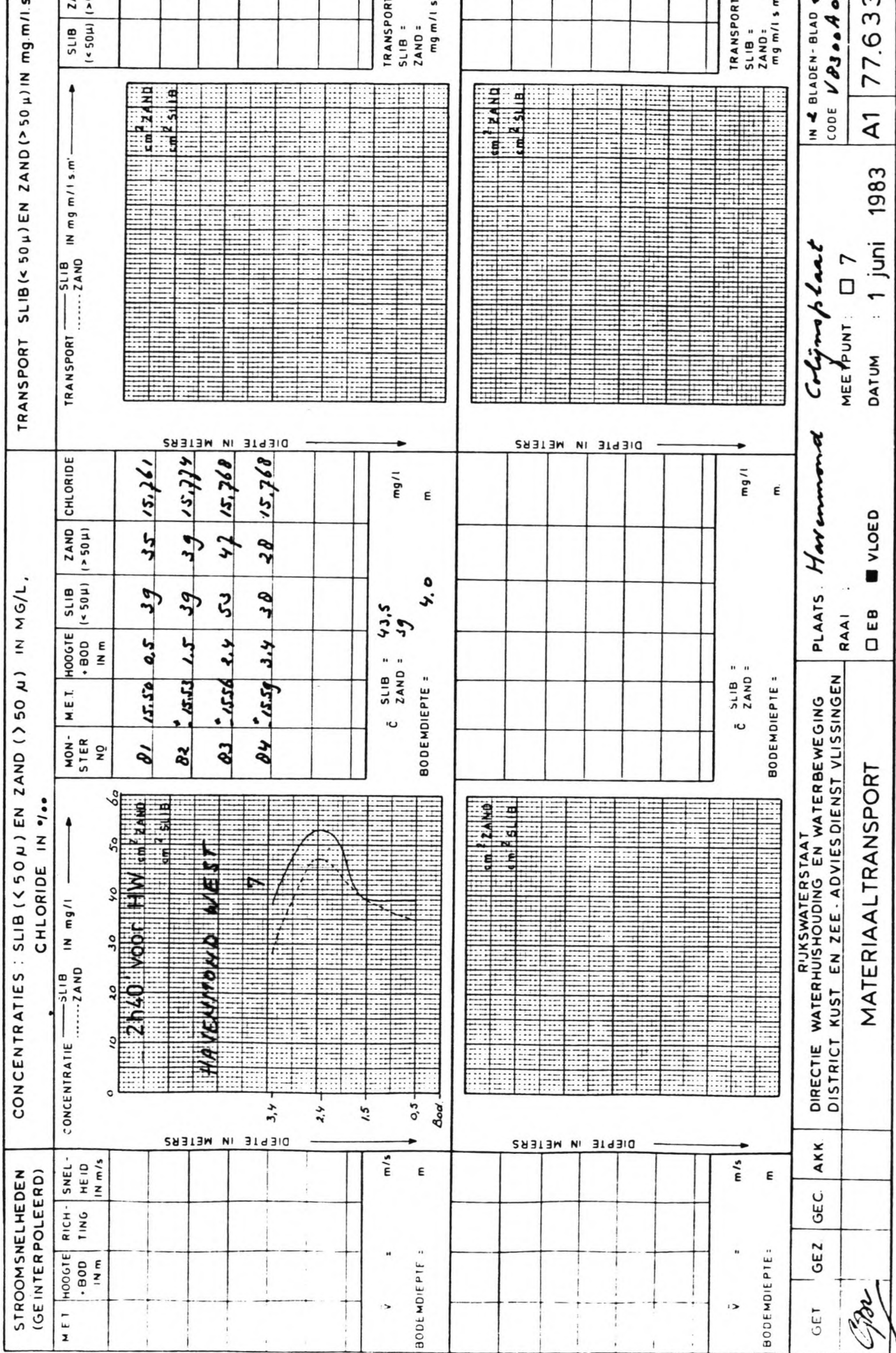
RIJKSWATERSTAAT
 DIRECTIE WATERHUISSHOUING EN WATERBEWEGING
 DISTRICT KUST EN ZEE - ADVISIEDIENST VLISSINGEN

PLAAST: *Havenmond Colijnsplaat*
 RAAI: _____
 MEETPUNT: 4EN5
 DATUM: 1 juni 1983

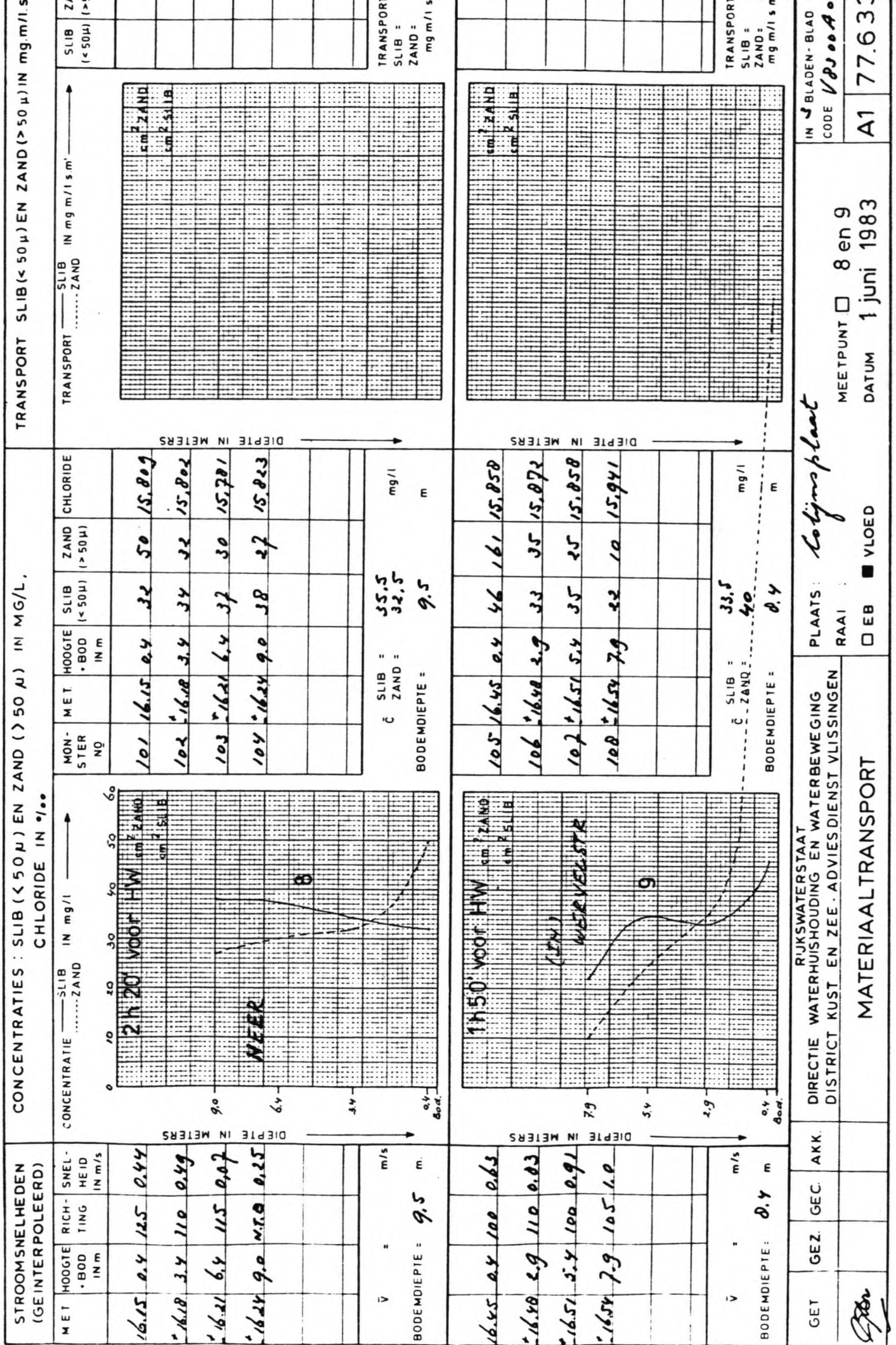
MATERIAALTRANSPORT
 EB VLOED

IN 2 BLADEN - BLAD 1
 CODE *V0300A00*
 A1 77.633

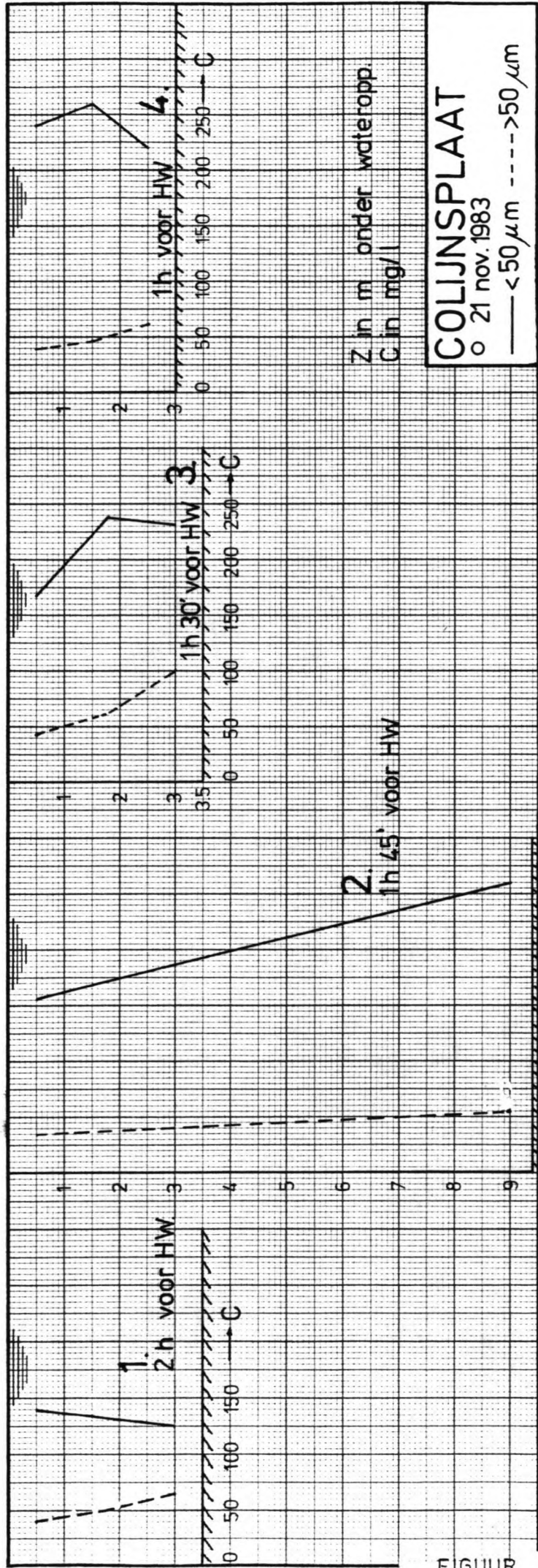
FIGUUR I.4



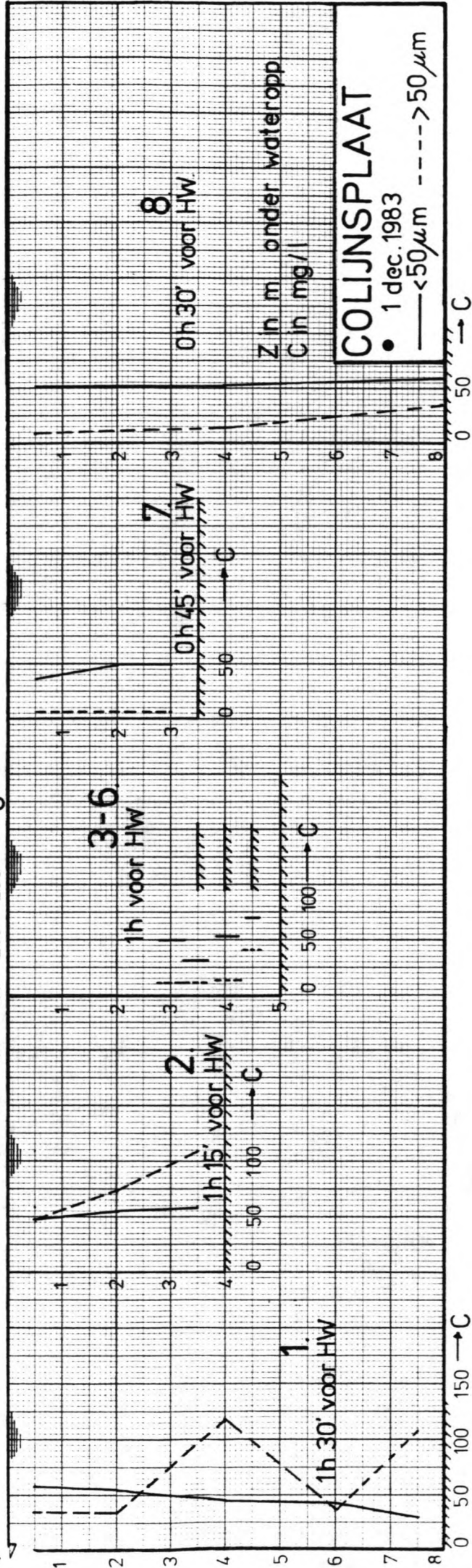
FIGUUR 1.5



FIGUUR I.6



FIGUUR 1.7



BIJLAGE II

STROOMBEELDEN IN HET MODEL

0,75 m/s

0,75

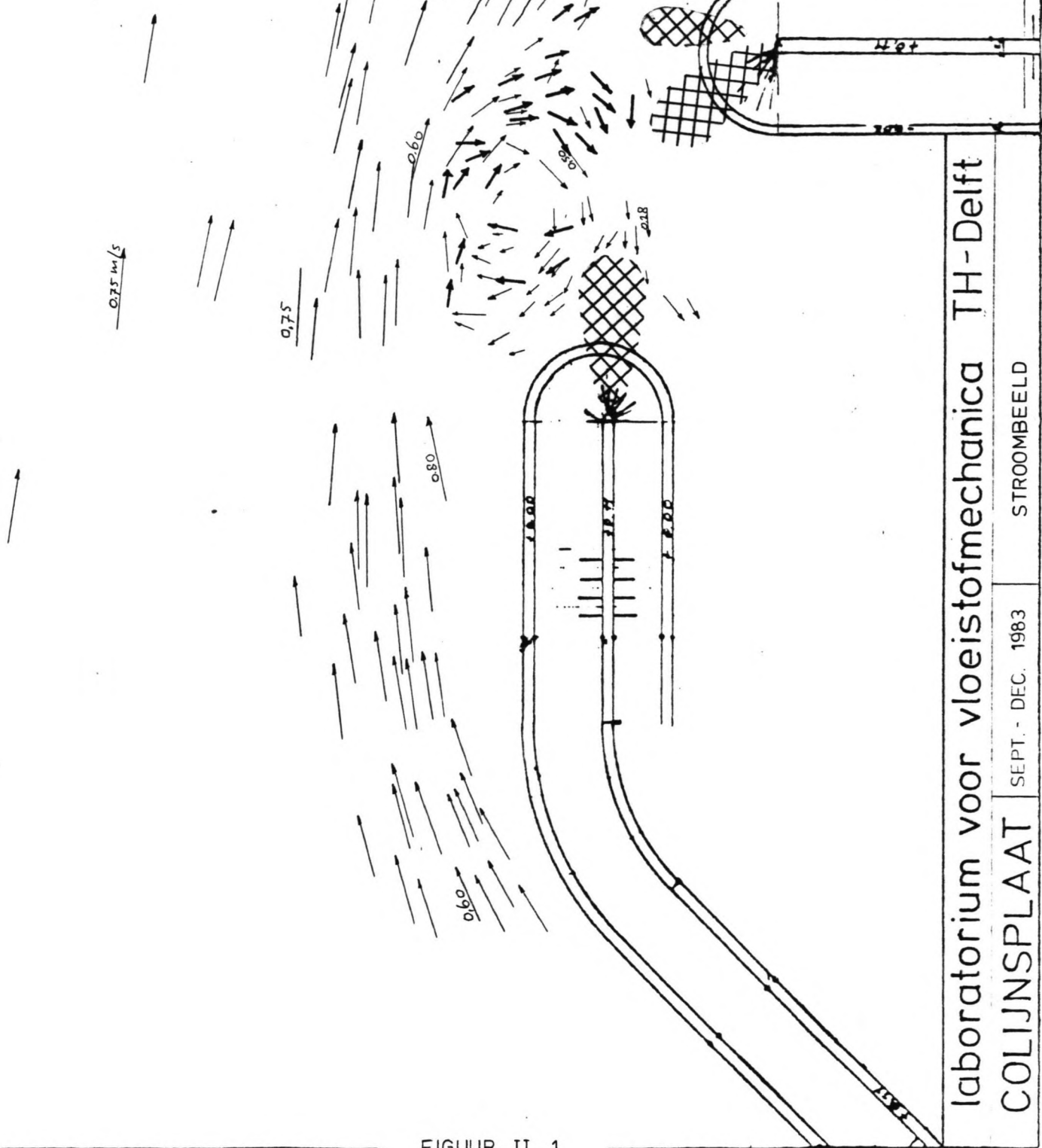
0,80

0,60

0,65

0,40

0,18



RICHTING OPP. STROOM
RICHTING BODEMSTROOM

PROEFNUMMER: T1

WATERSTAND : NAP + 0,90 m

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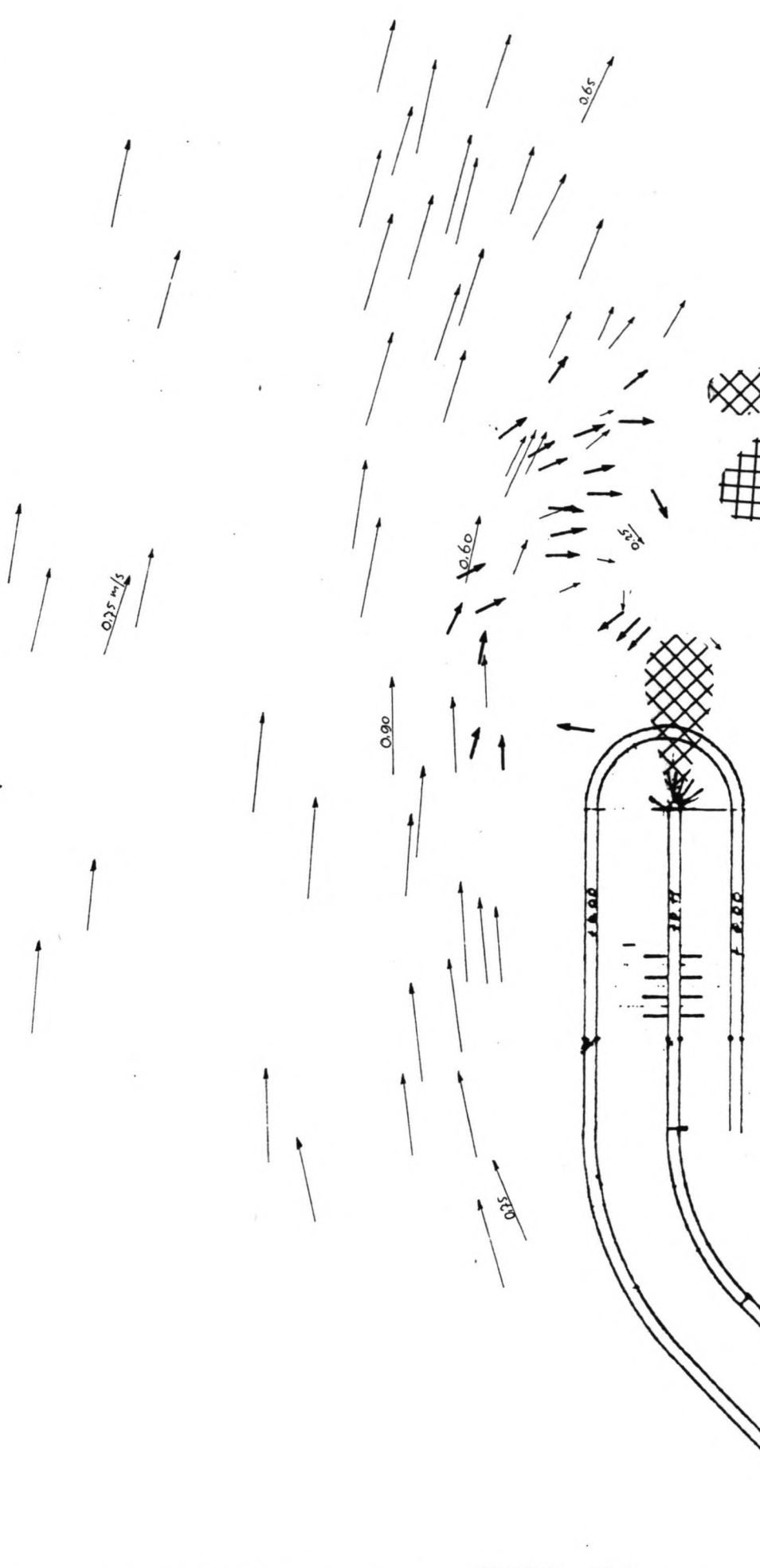
STROOMBEELD

SEPT. - DEC. 1983

COLIJNSPLAAT

VLOED

FIGUUR II. 1



RICHTING OPP. STROOM →
 RICHTING BODEMSTROOM →

PROEFNUMMER: T2

WATERSTAND : NAP + 0,70 m

laboratorium voor vloeistofmechanica TH-Delft

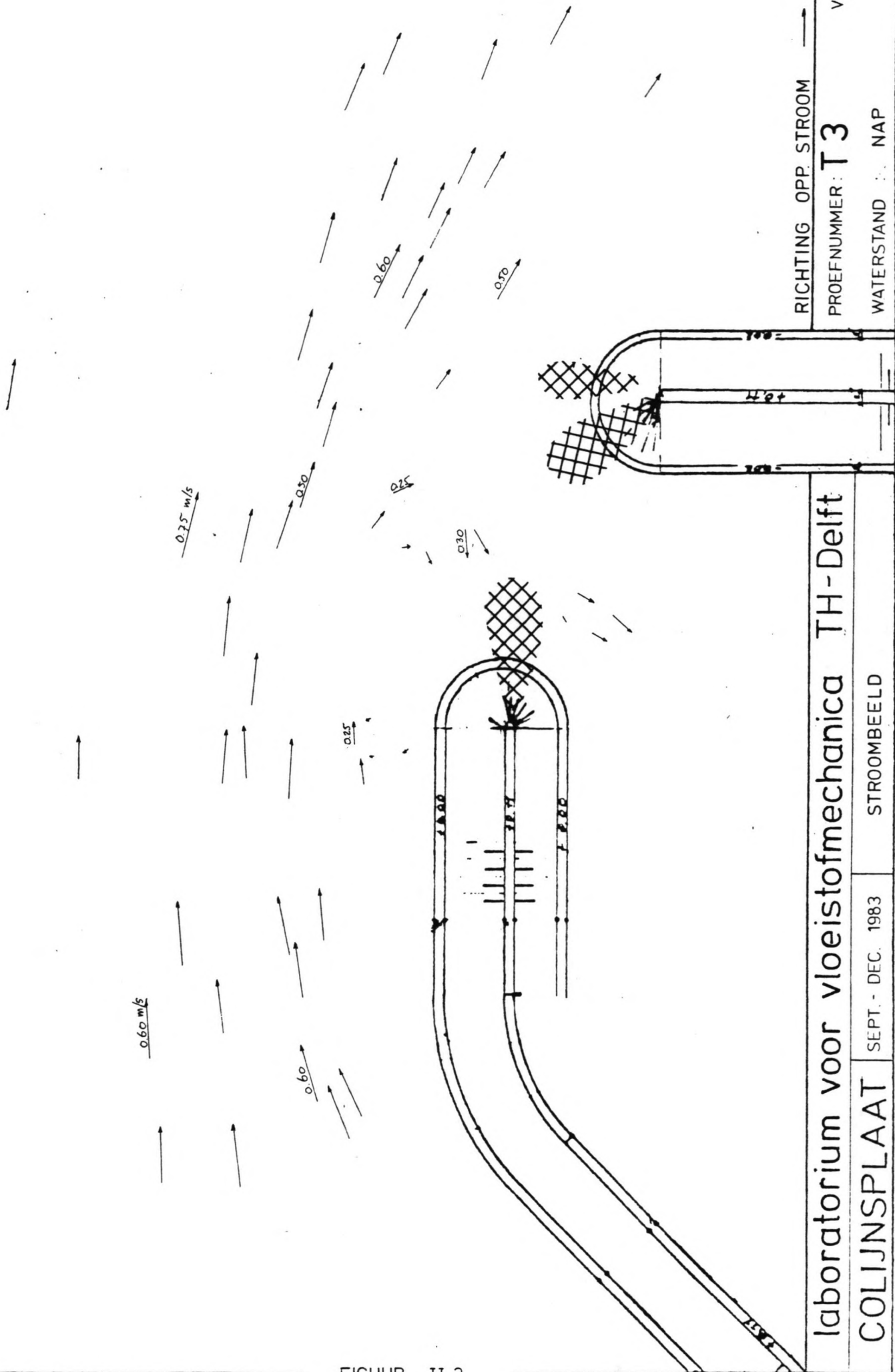
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STROOMBEELD

VLOED.

FIGUUR II.2



RICHTING OPP. STROOM

PROEFNUMMER: T3

WATERSTAND NAP

VLOED

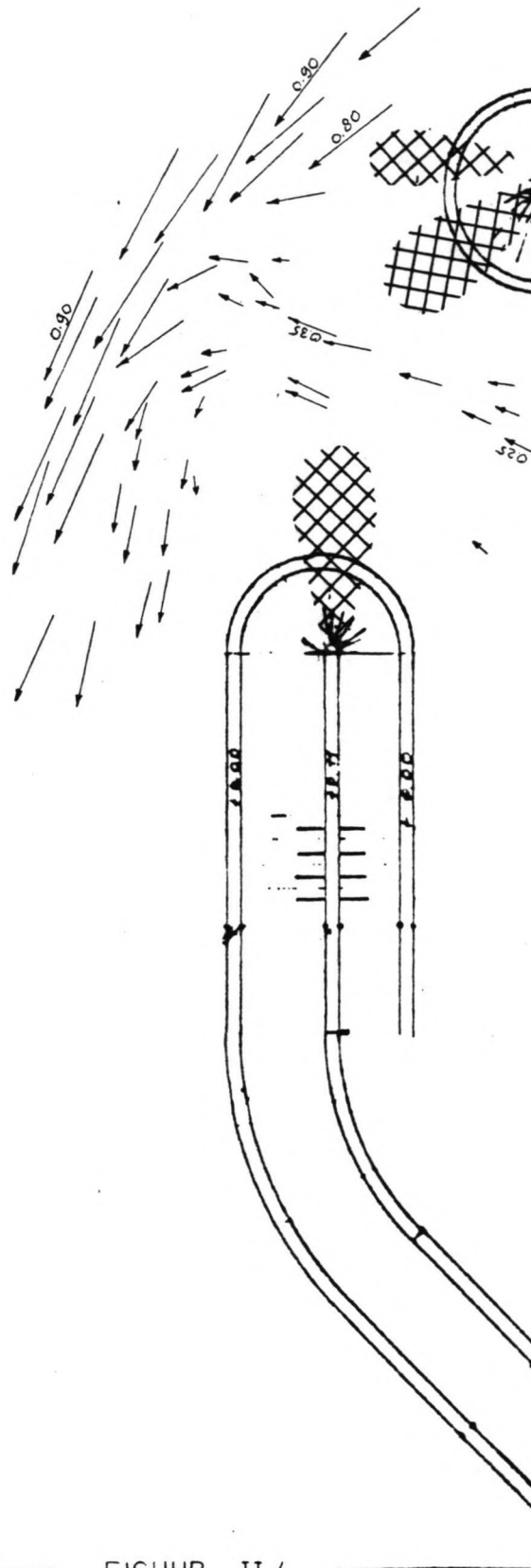
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FIGUUR II.3



RICHTING OPP. STROOM →

PROEFNUMMER: T4 EB

WATERSTAND : NAP - 0,15 m

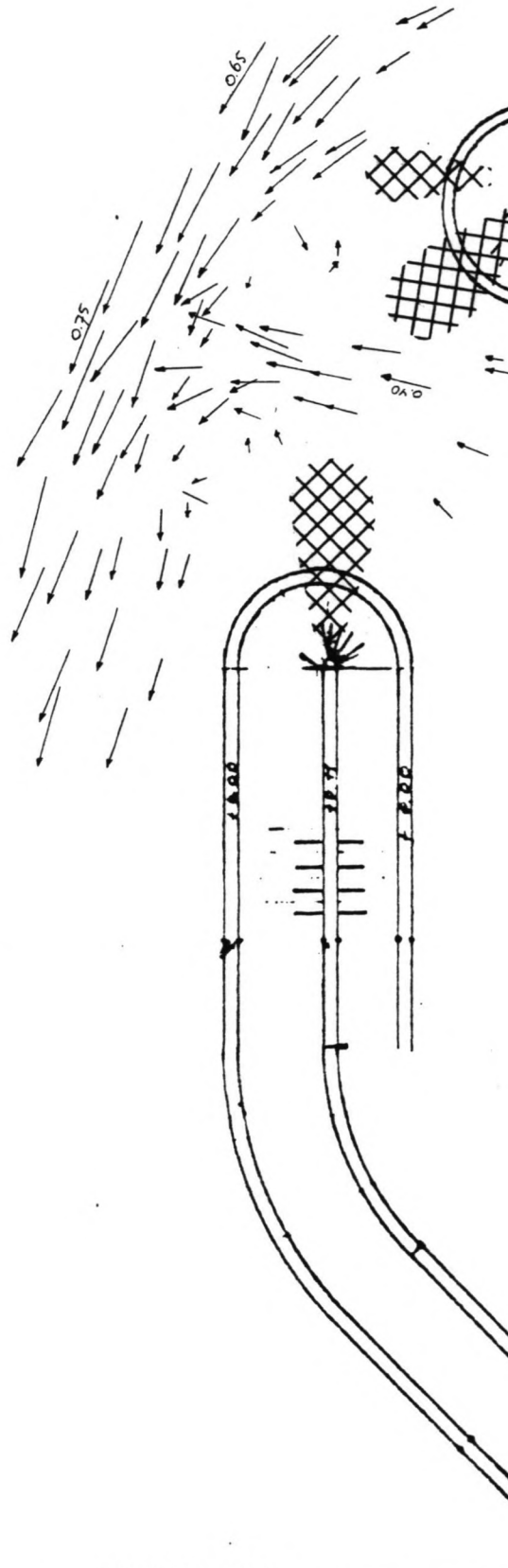
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FIGUUR II 4



RICHTING OP: STROOM →
 PROEFNUMMER: T5 EB
 WATERSTAND: NAP -0,80 m

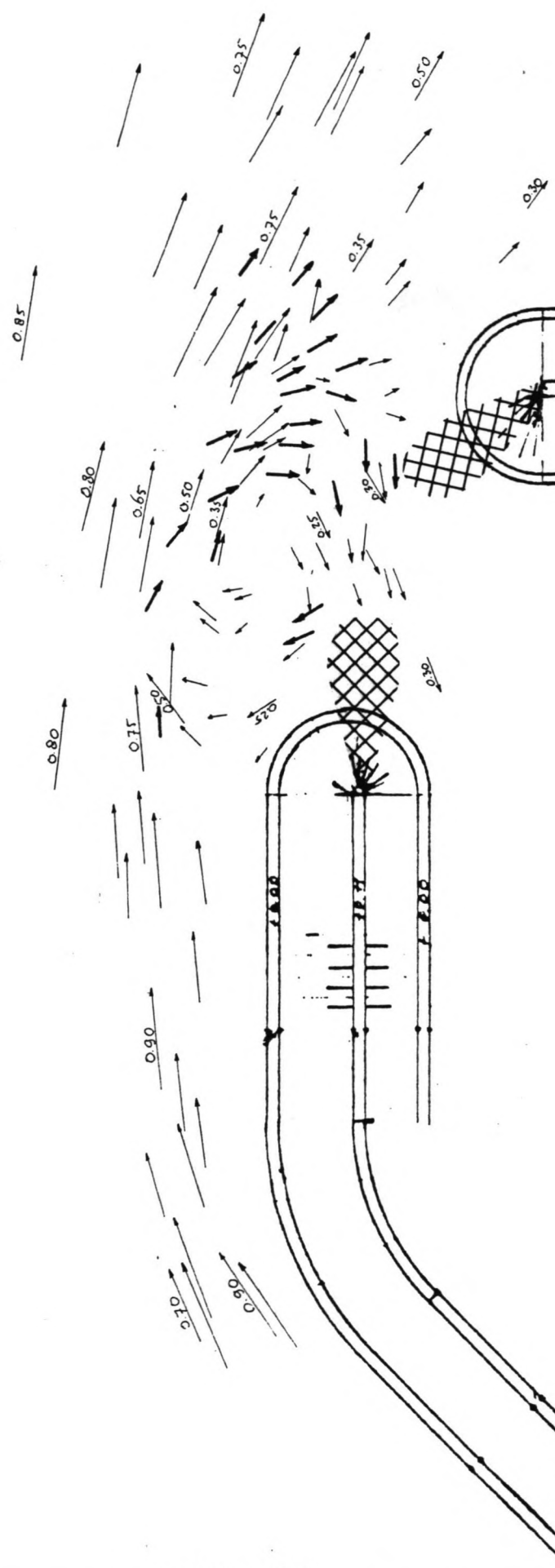
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STROOMBEELD

FIGUUR II 5



RICHTING OPP. STROOM →
 RICHTING BODEMSTROOM →

PROEFNUMMER: **T 6**
 WATERSTAND : NAP + 0,90 m
 VLOED

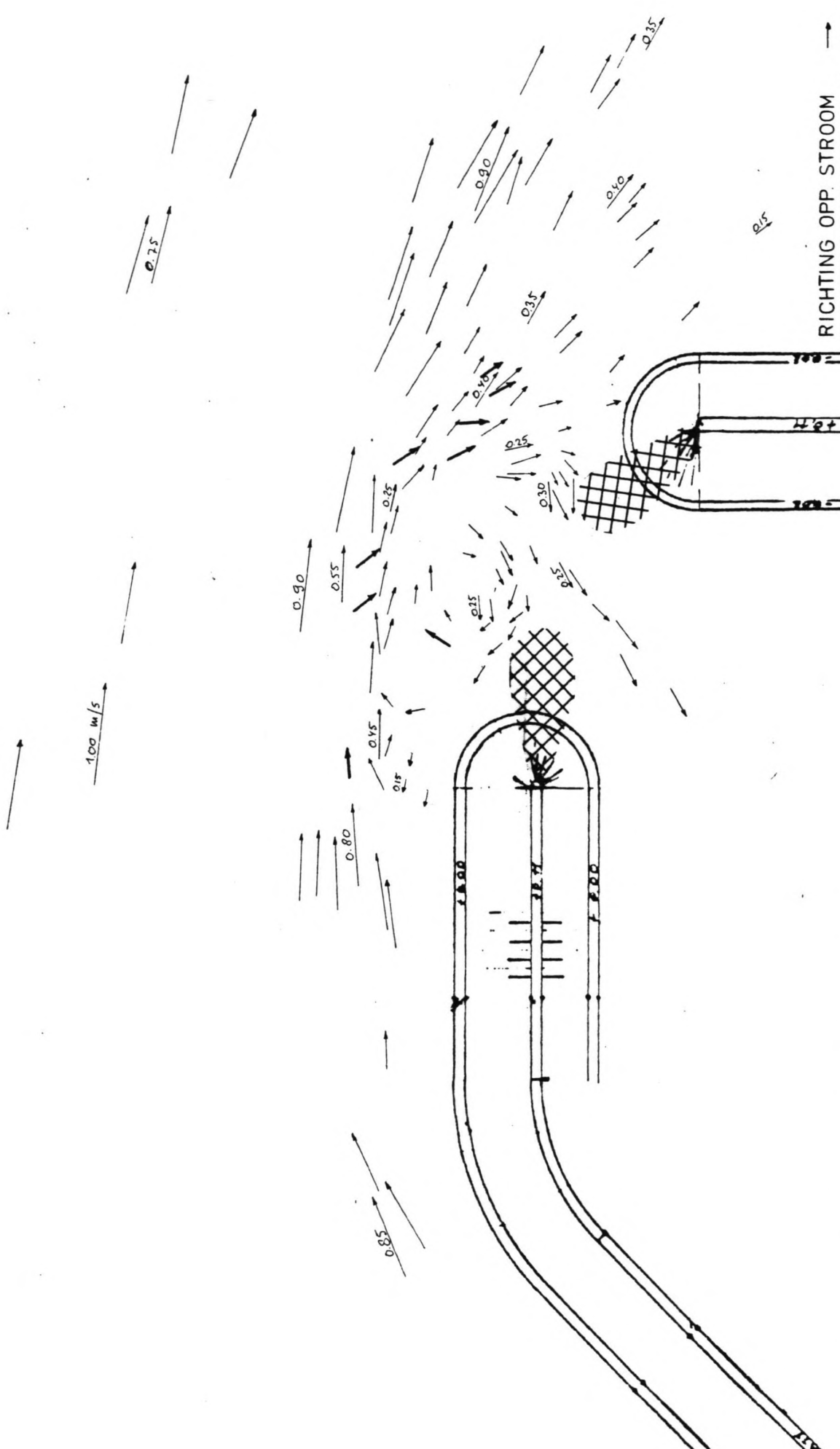
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FIGUUR II.6



RICHTING OPP. STROOM →
 RICHTING BODEMSTROOM ←

PROEFNUMMER: T7

VLOED.

WATERSTAND NAP +0,70 m

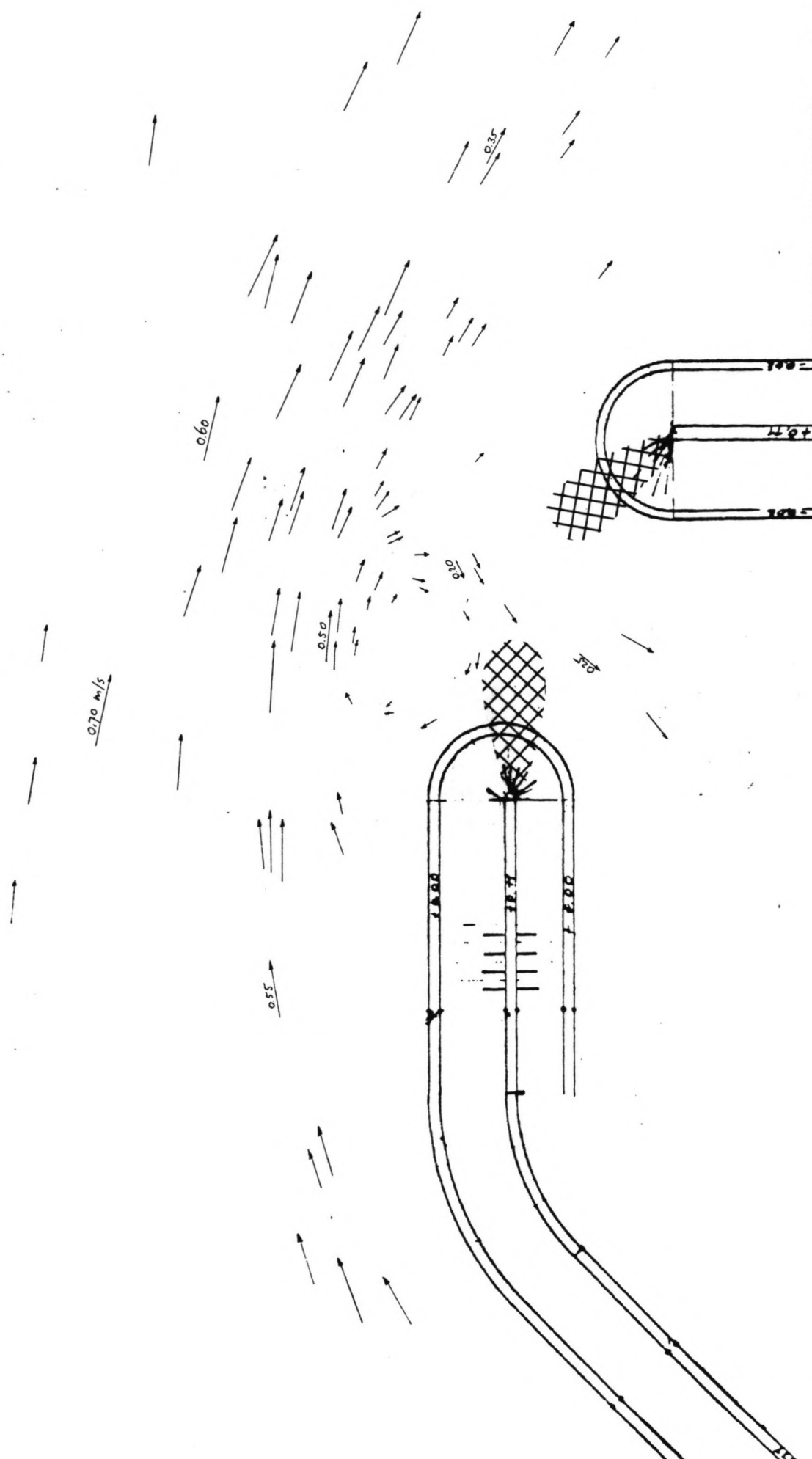
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FIGUUR II.7



RICHTING OPP. STROOM → VLOED.
 PROEFNUMMER: T8
 WATERSTAND: NAP

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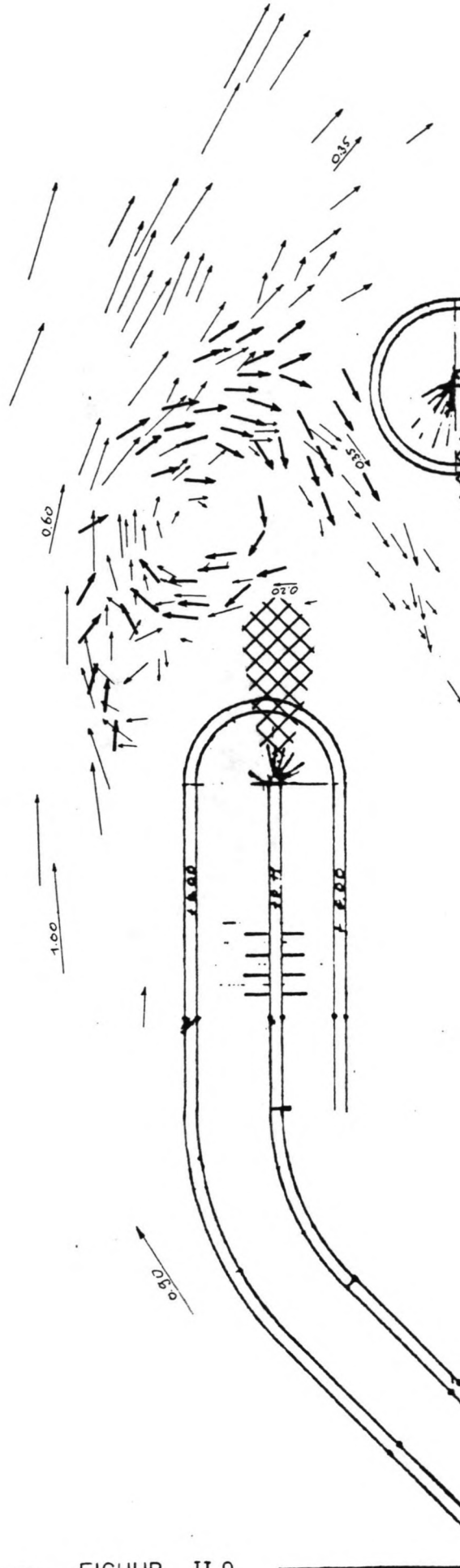
STROOMBEEELD

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FIGUUR II.8

0.95 m/s



OPP. STROOM RICHTING →
 BODEMSTROOM RICHTING →

PROEFNUMMER: T 9

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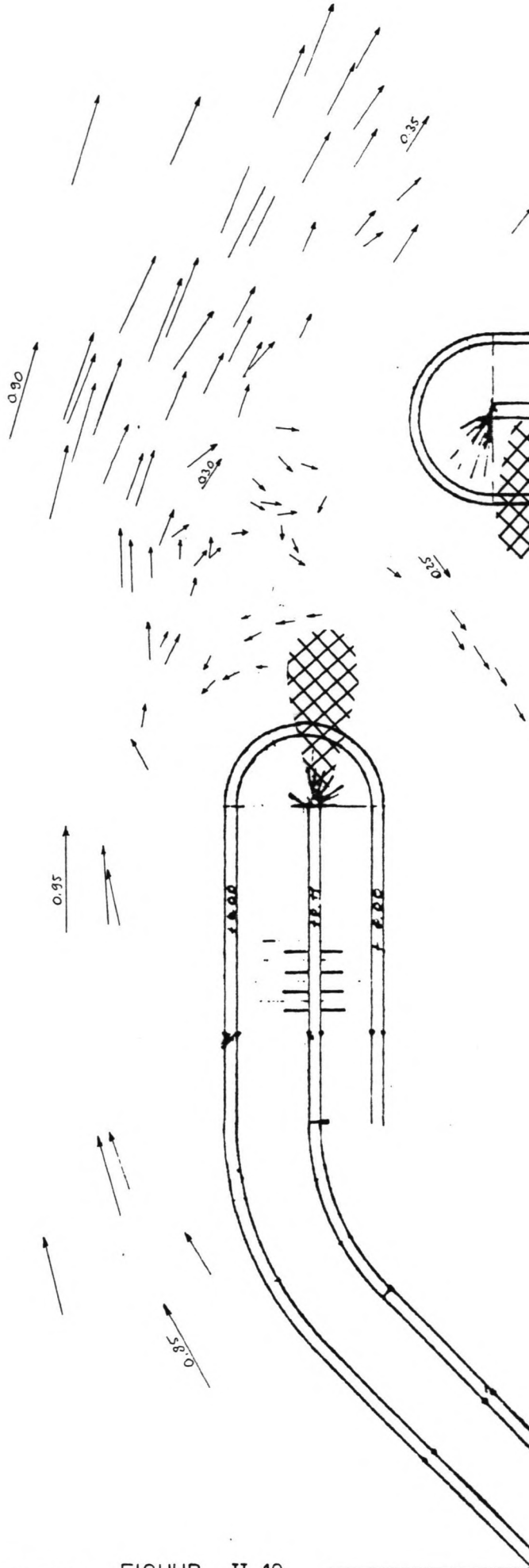
STROOMBEEELD

WATERSTAND : NAP + 0,90 m

VLOED

FIGUUR II.9

0.85



RICHTING OPP. STROOM

PROEFNUMMER: T10

WATERSTAND: NAP + 0,70 m

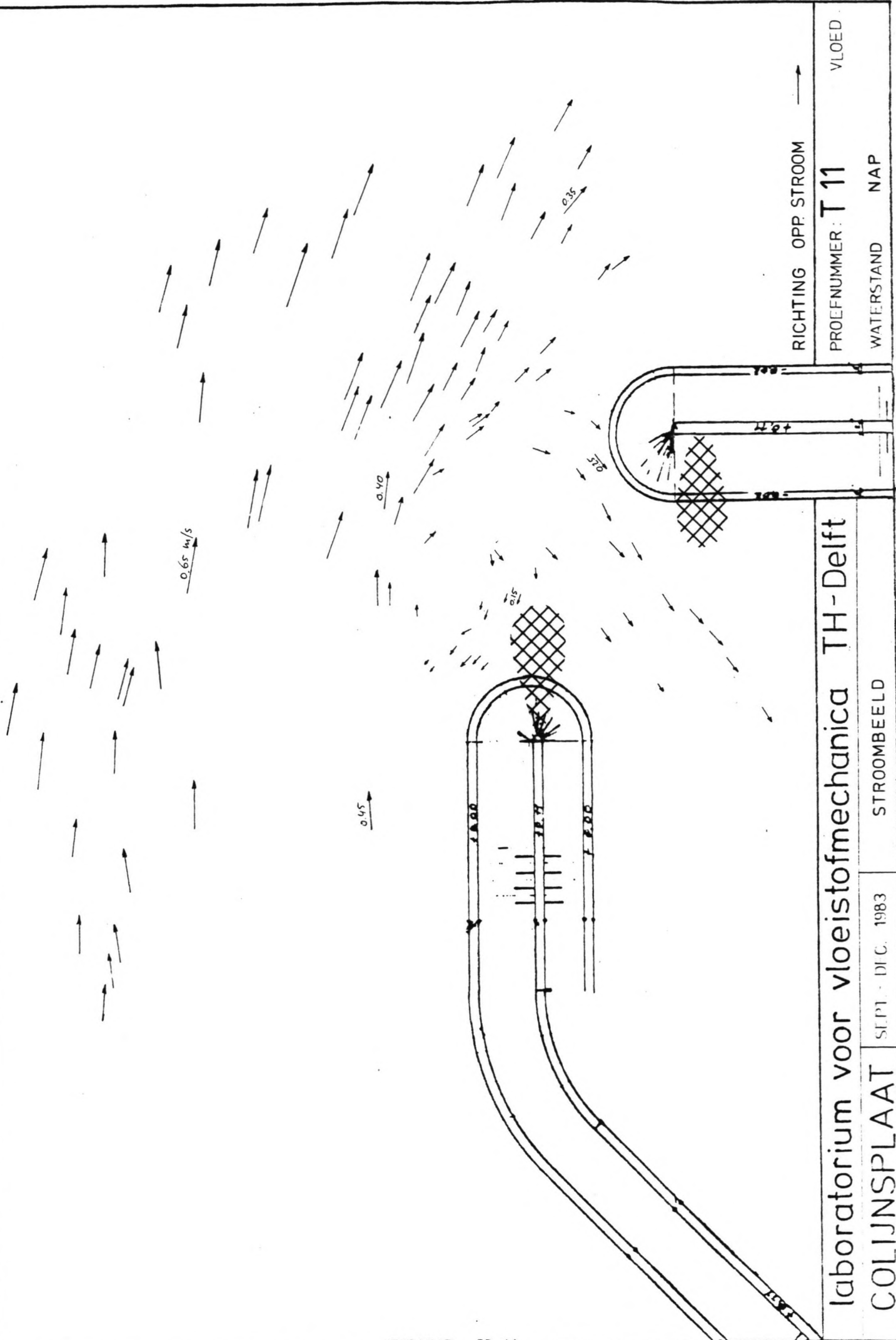
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FIGUUR II.10



RICHTING OPP STROOM → VLOED

PROEFNUMMER: T 11

WATERSTAND NAP

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SEPT. DIC. 1983

COLIJNSPLAAT

FIGUUR II.11

0.90 m/s

1.00

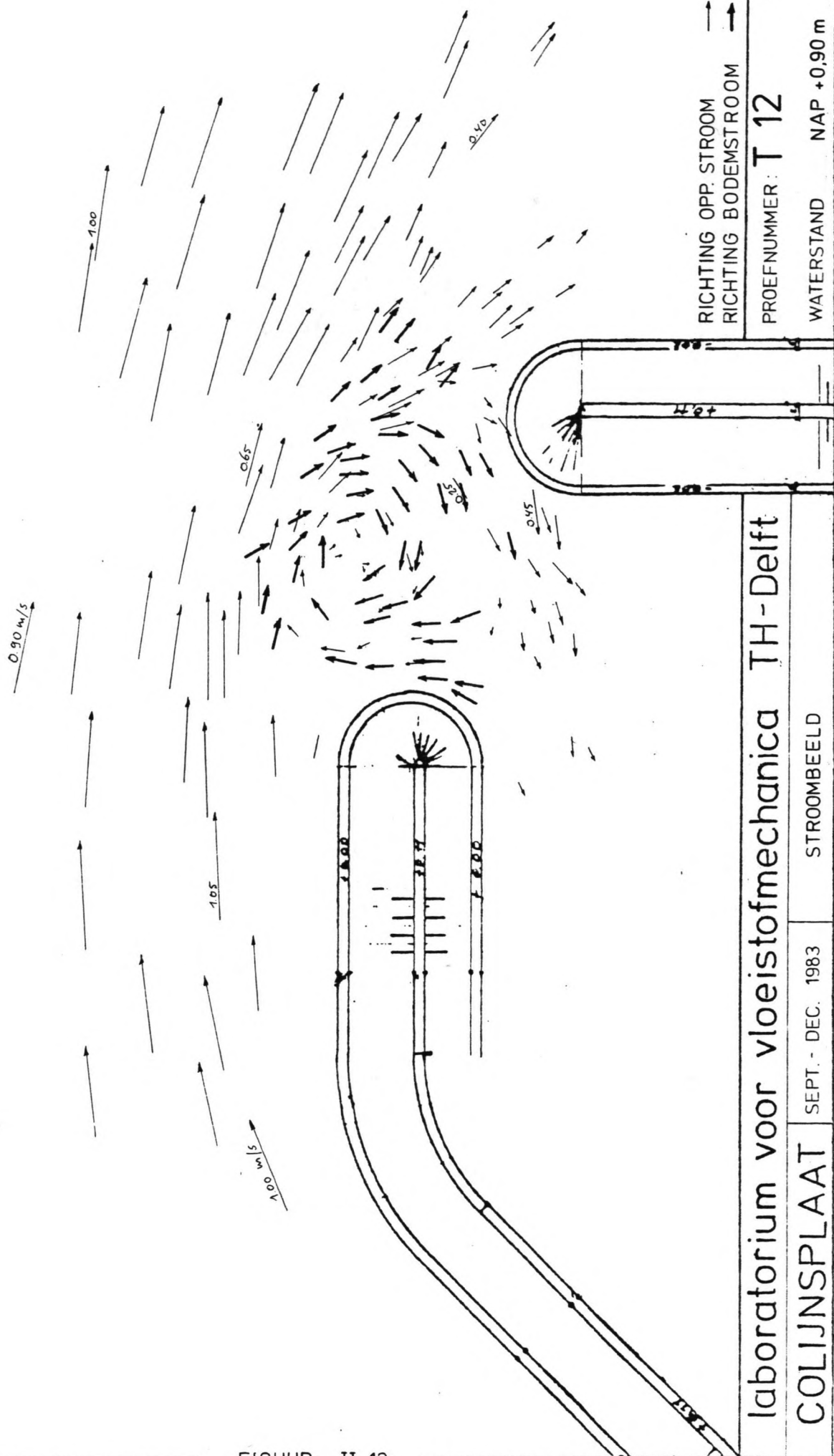
1.05

1.00 m/s

0.65

0.40

0.45



RICHTING OPP. STROOM →
 RICHTING BODEMSTROOM ←

PROEFNUMMER: T 12

VLOED

WATERSTAND NAP +0.90 m

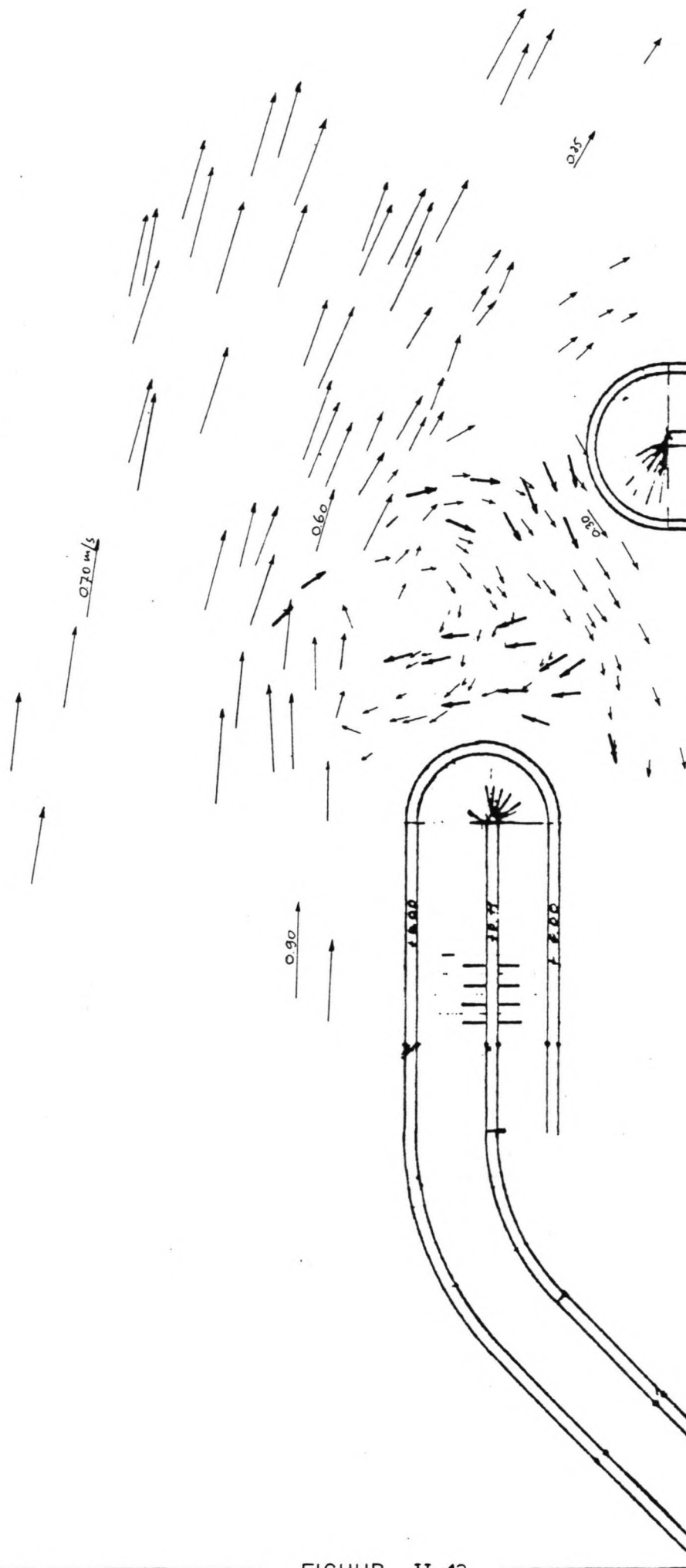
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FIGUUR II.12



OPP. STROOM RICTING
BODEMSTROOM RICTING

PROEFNUMMER: T13

WATERSTAND : NAP +0,70 m

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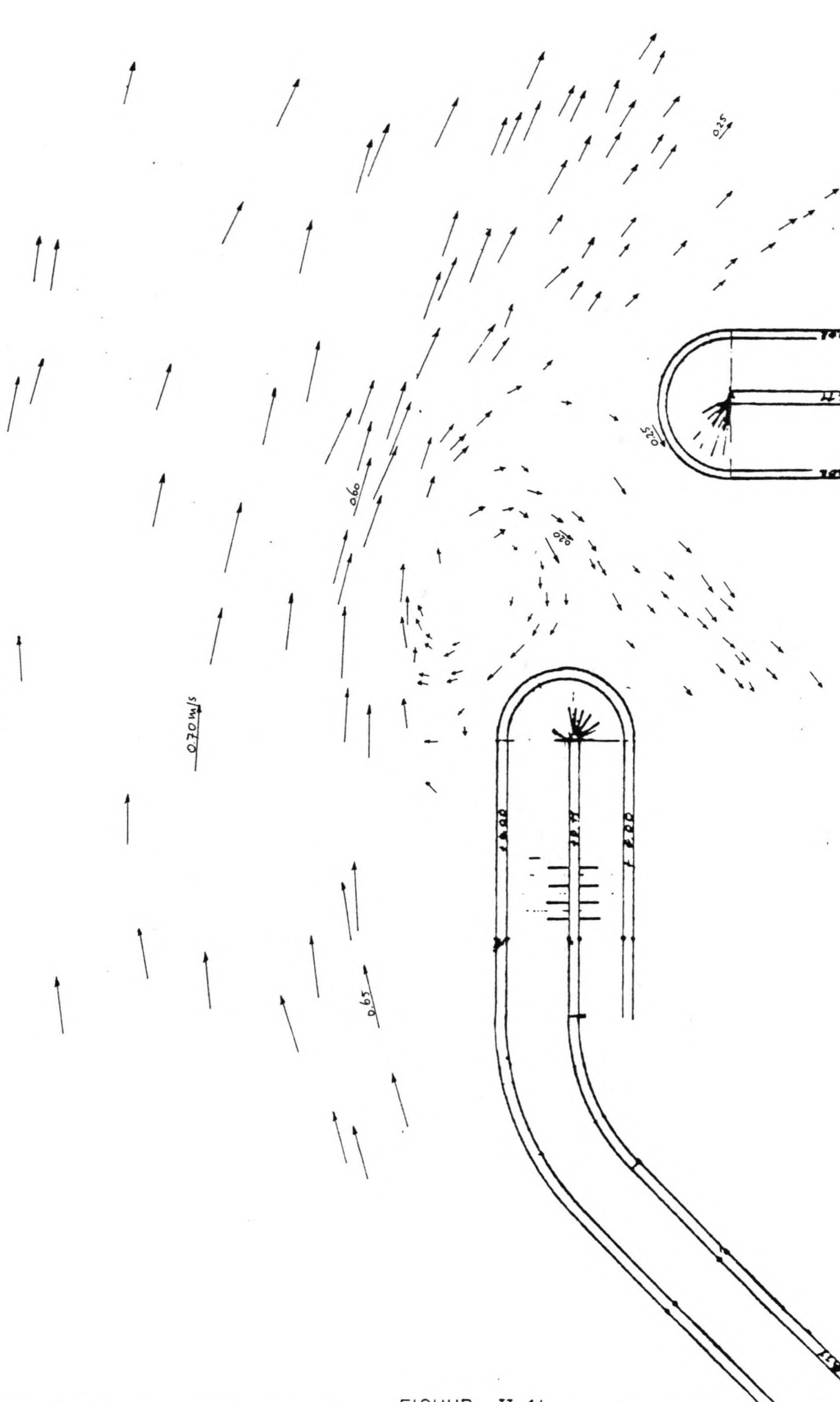
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FIGUUR II 13



RICHTING OPP. STROOM →
 PROEFNUMMER: **T14**
 WATERSTAND : NAP

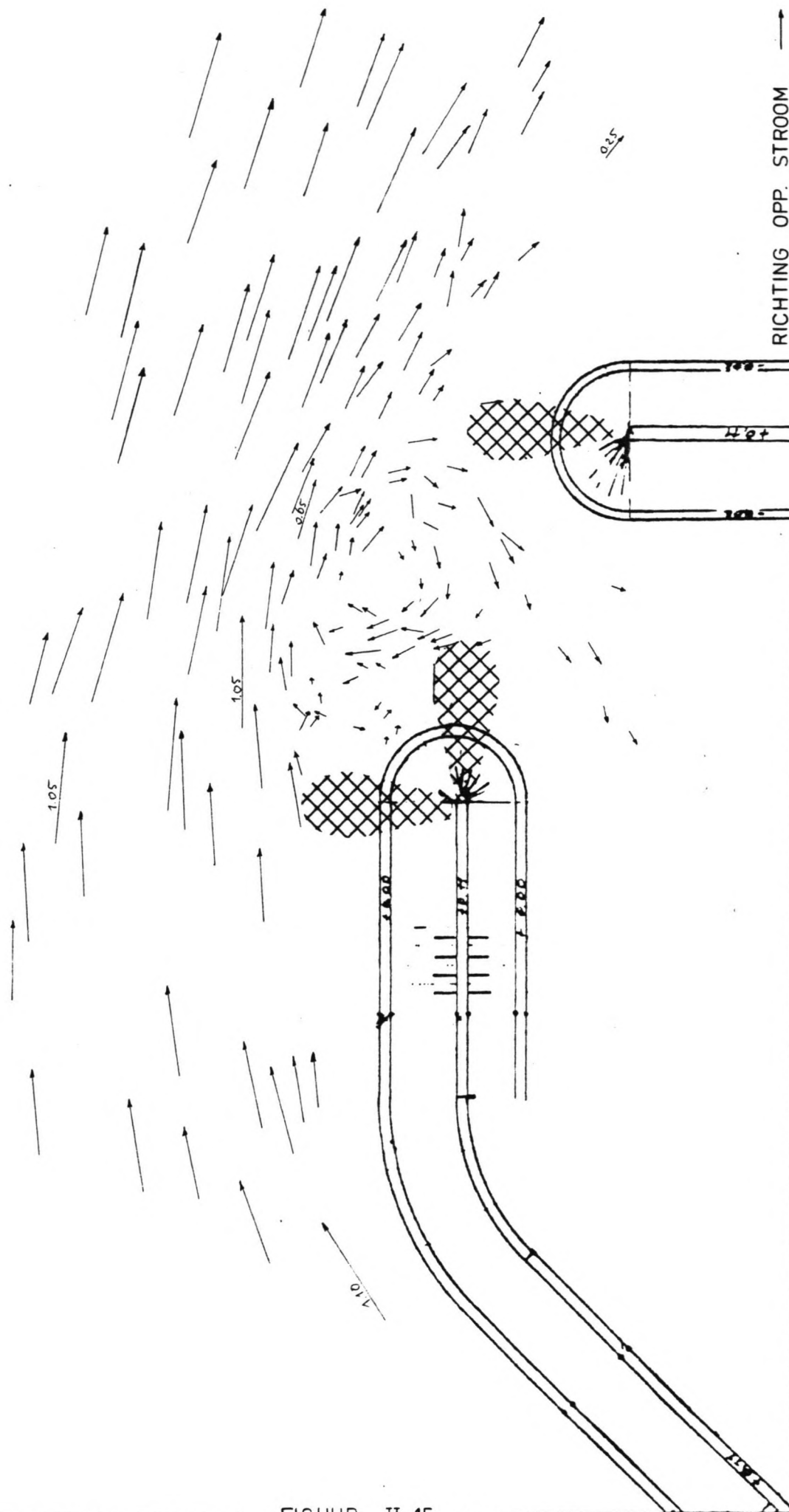
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FIGUUR II. 14



RICHTING OPP. STROOM →
 PROEFNUMMER: T15
 WATERSTAND : NAP + 0,90 m
 VLOED

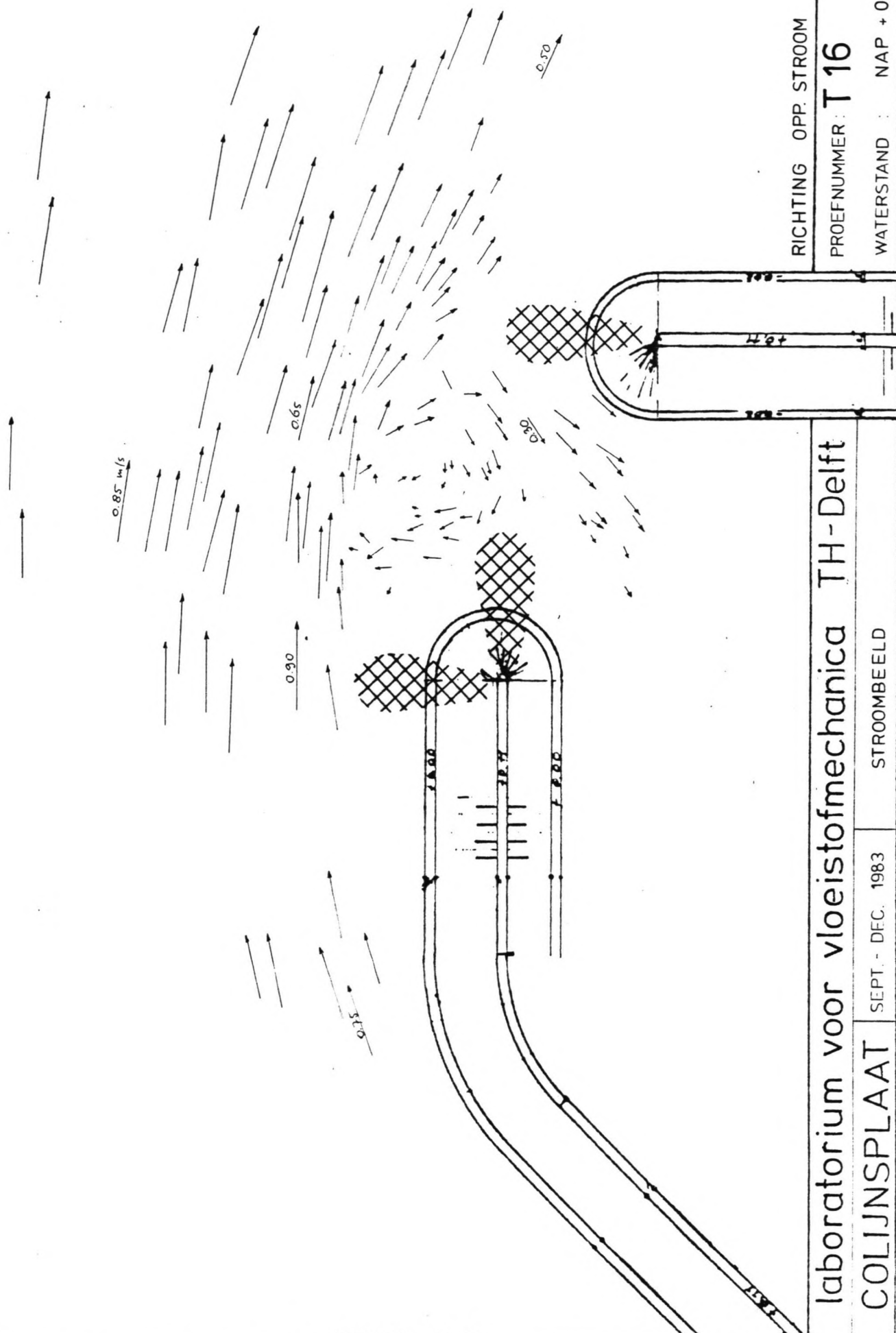
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FIGUUR II 15



RICHTING OPP. STROOM →
 PROEFNUMMER: T16
 WATERSTAND : NAP + 0,70 m

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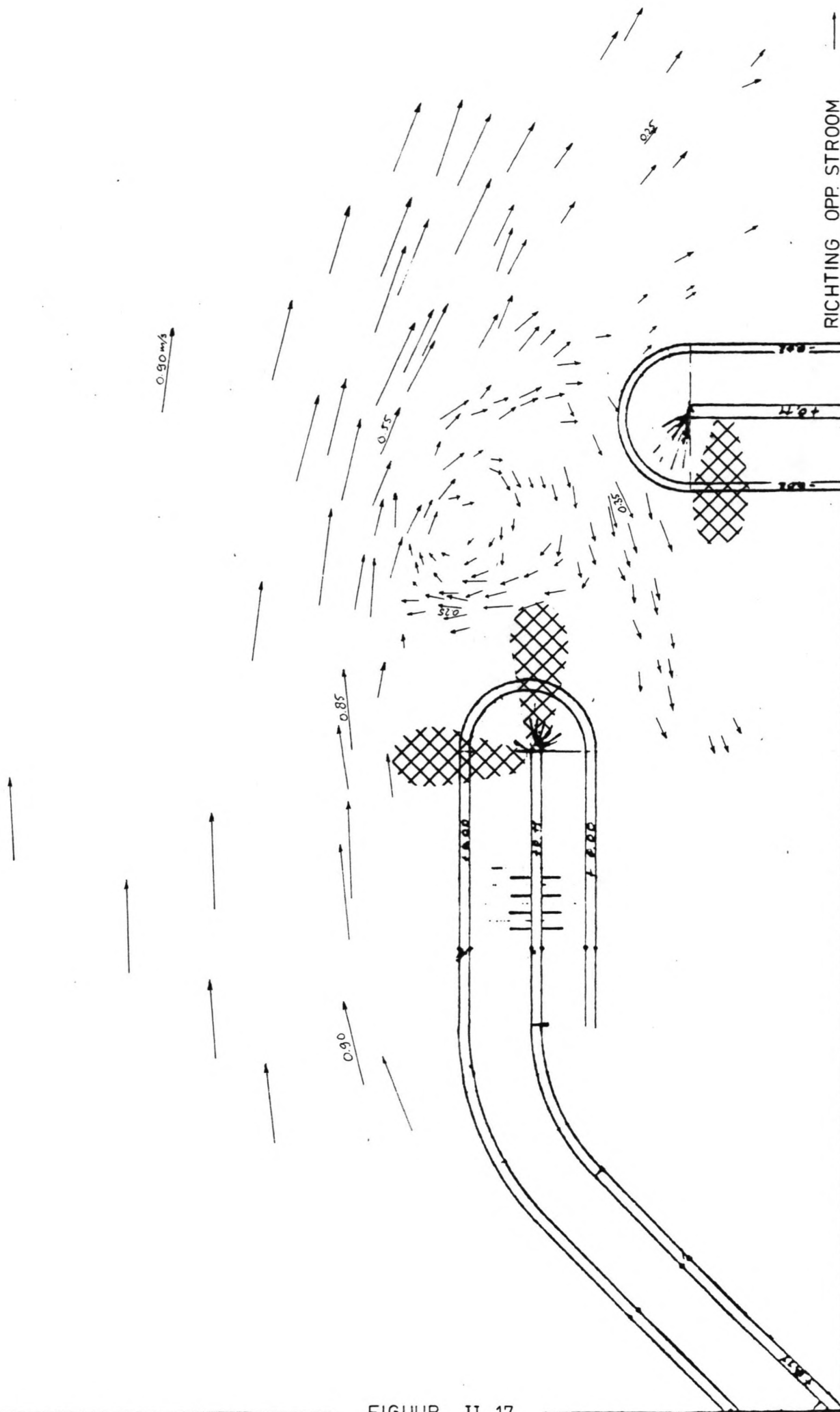
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FIGUUR II.16



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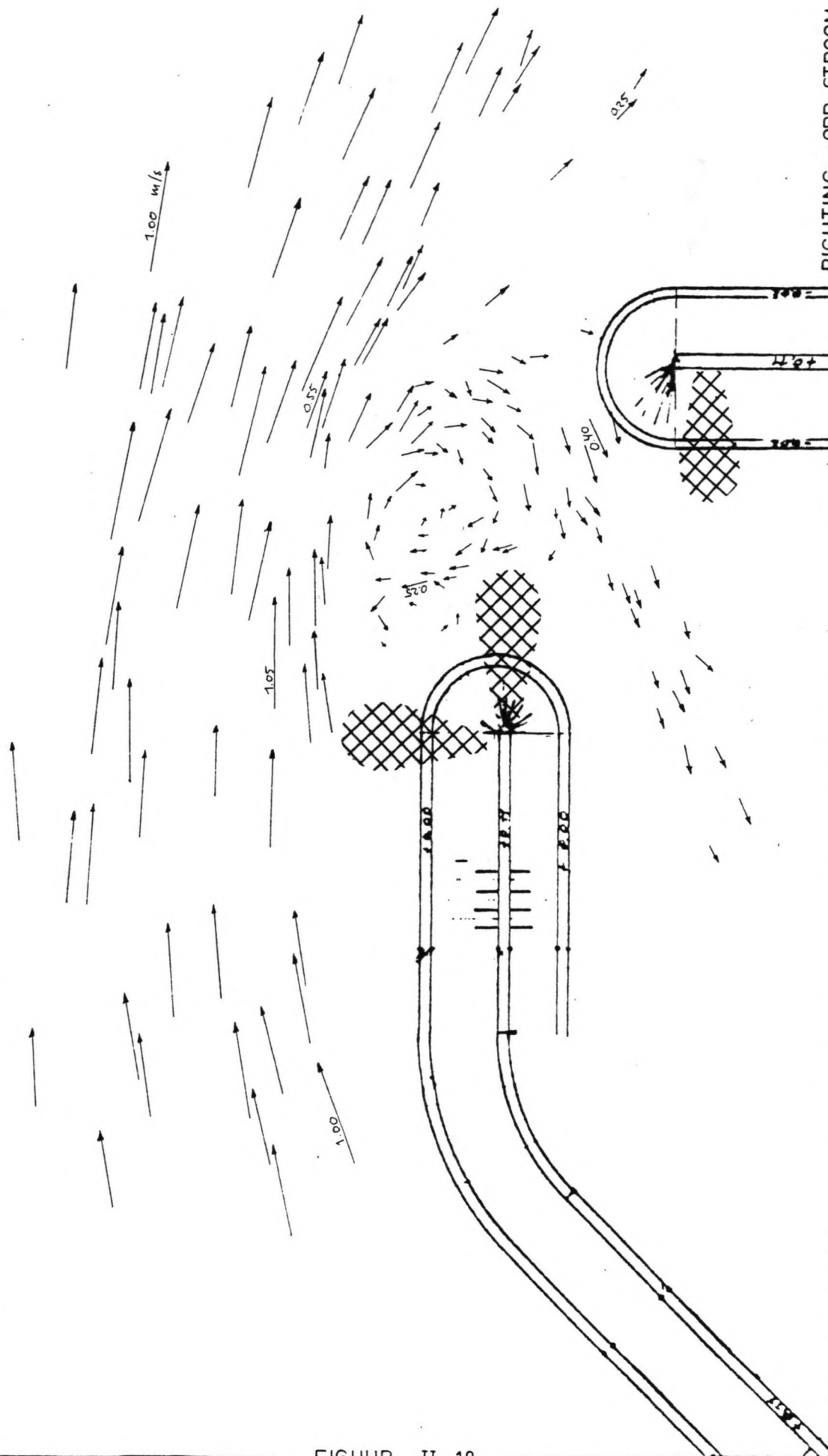
RICHTING OPP. STROOM

PROEFNUMMER: T17

WATERSTAND : NAP + 0,90 m

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FIGUUR II.17



RICHTING OPP. STROOM →
 PROEFNUMMER: **T18**
 WATERSTAND NAP + 0,70 m

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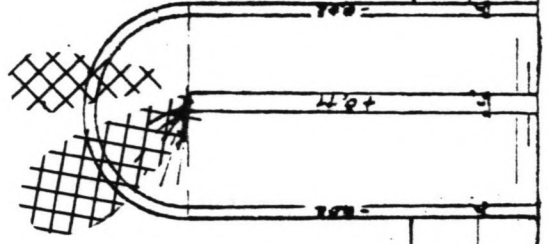
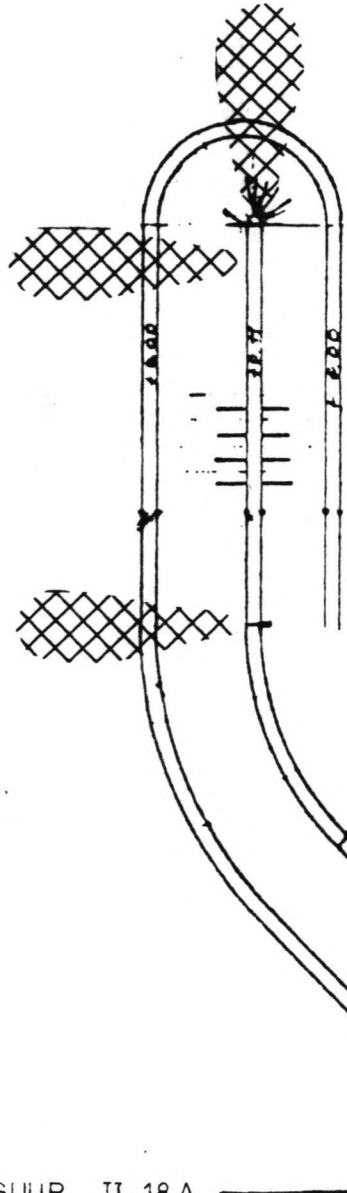
STROOMBEELD

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FIGUUR II.18



FIGUUR II.18 A

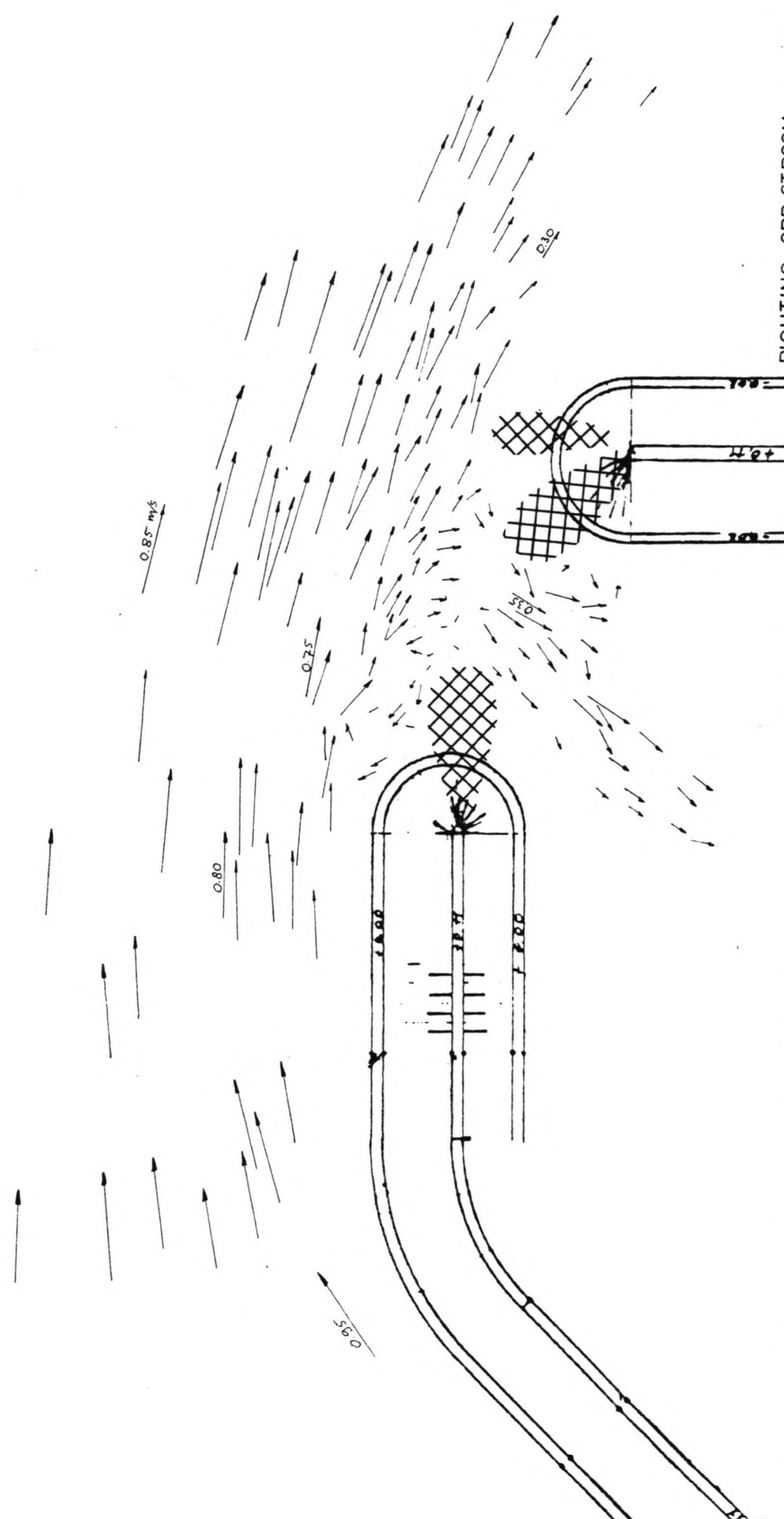
PROEFNUMMER: T 18 A

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LAY OUT



RICHTING OPP. STROOM →
 PROEFNUMMER: T 19
 WATERSTAND NAP + 0,90 m

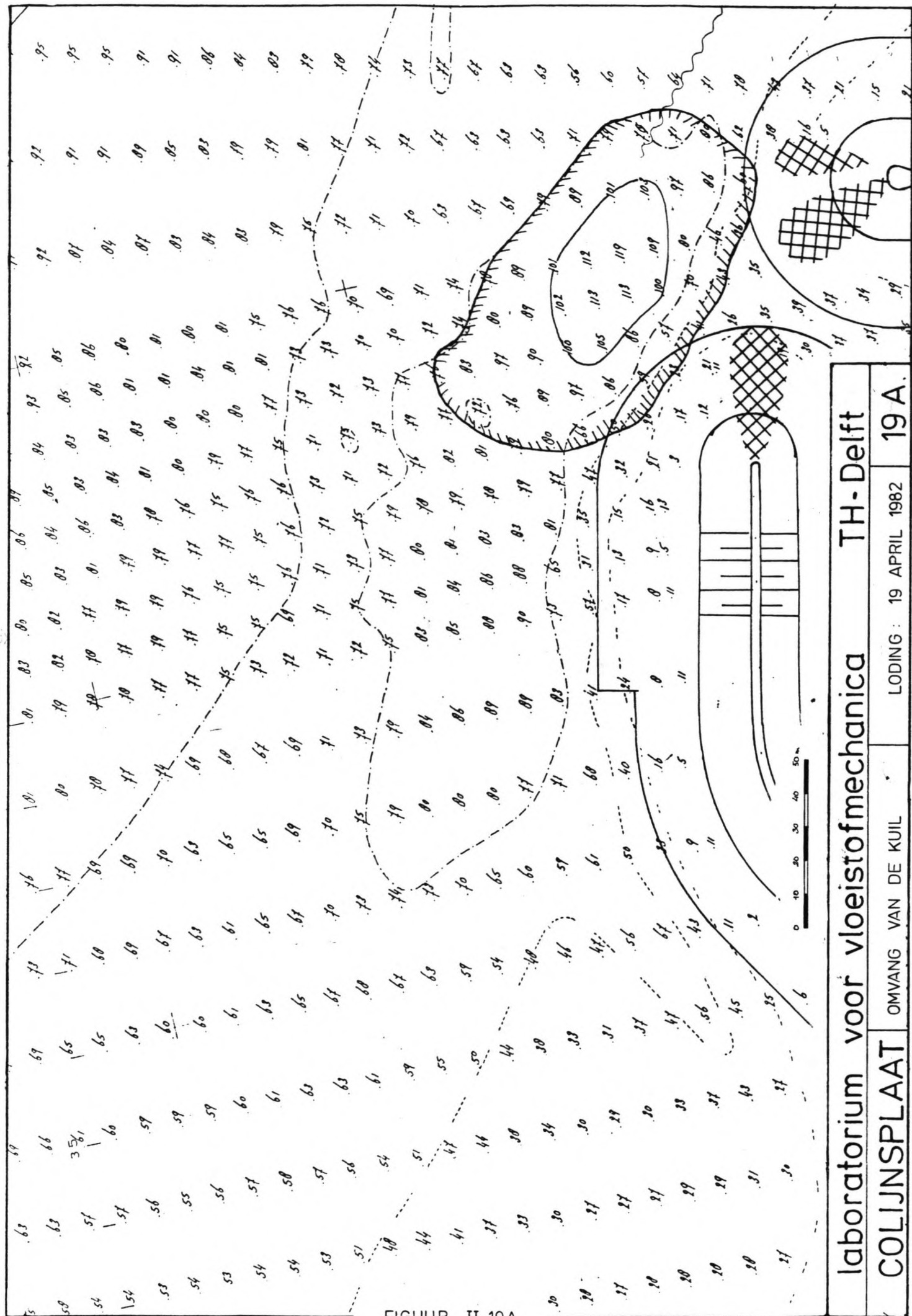
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STROOMBEELD

FIGUUR II .19



FIGUUR II.19A

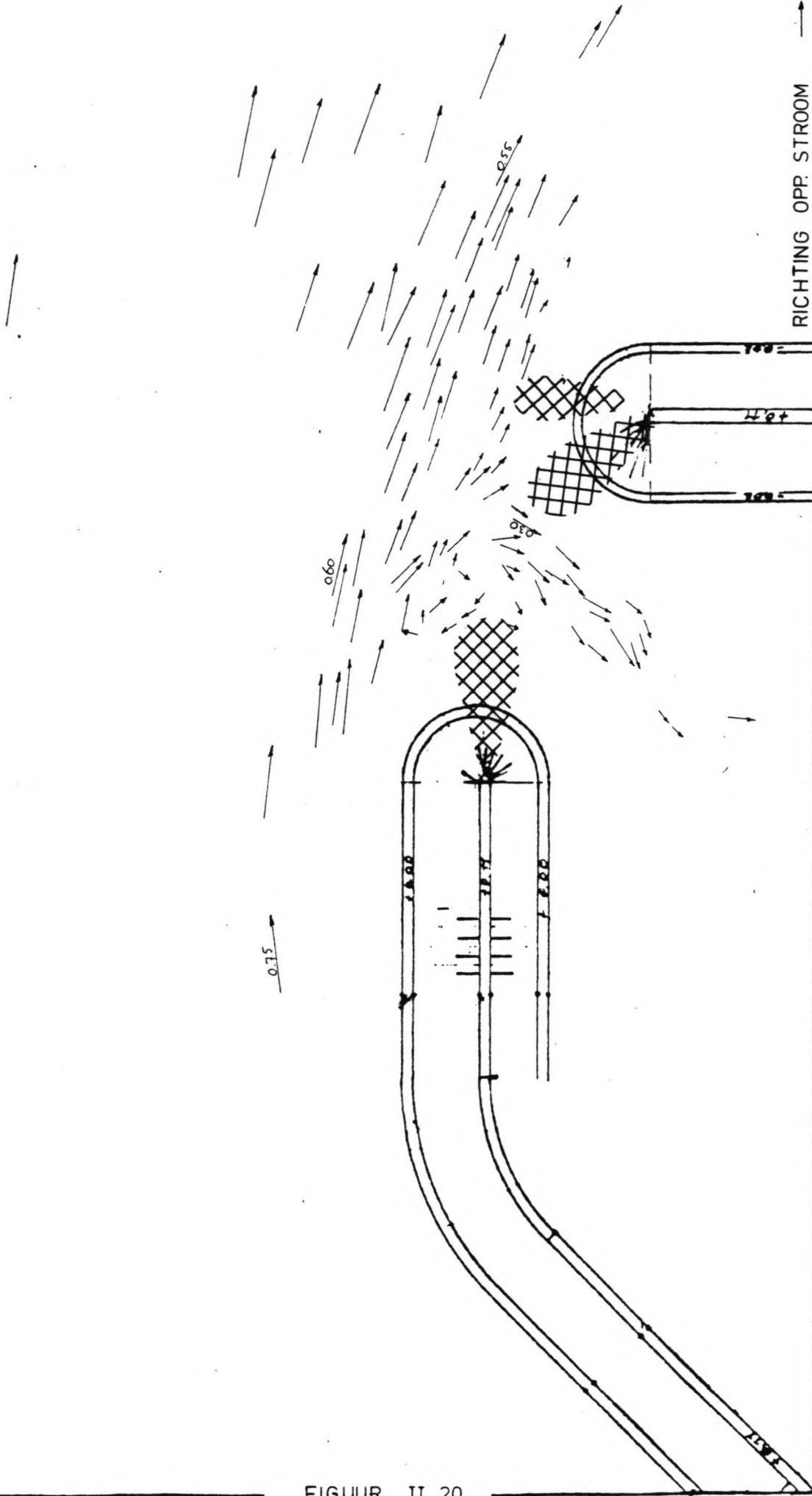
0.70 m/s

0.75

0.60

0.30

0.55



RICHTING OPP. STROOM

PROEFNUMMER: T20

WATERSTAND : NAP +0,70 m

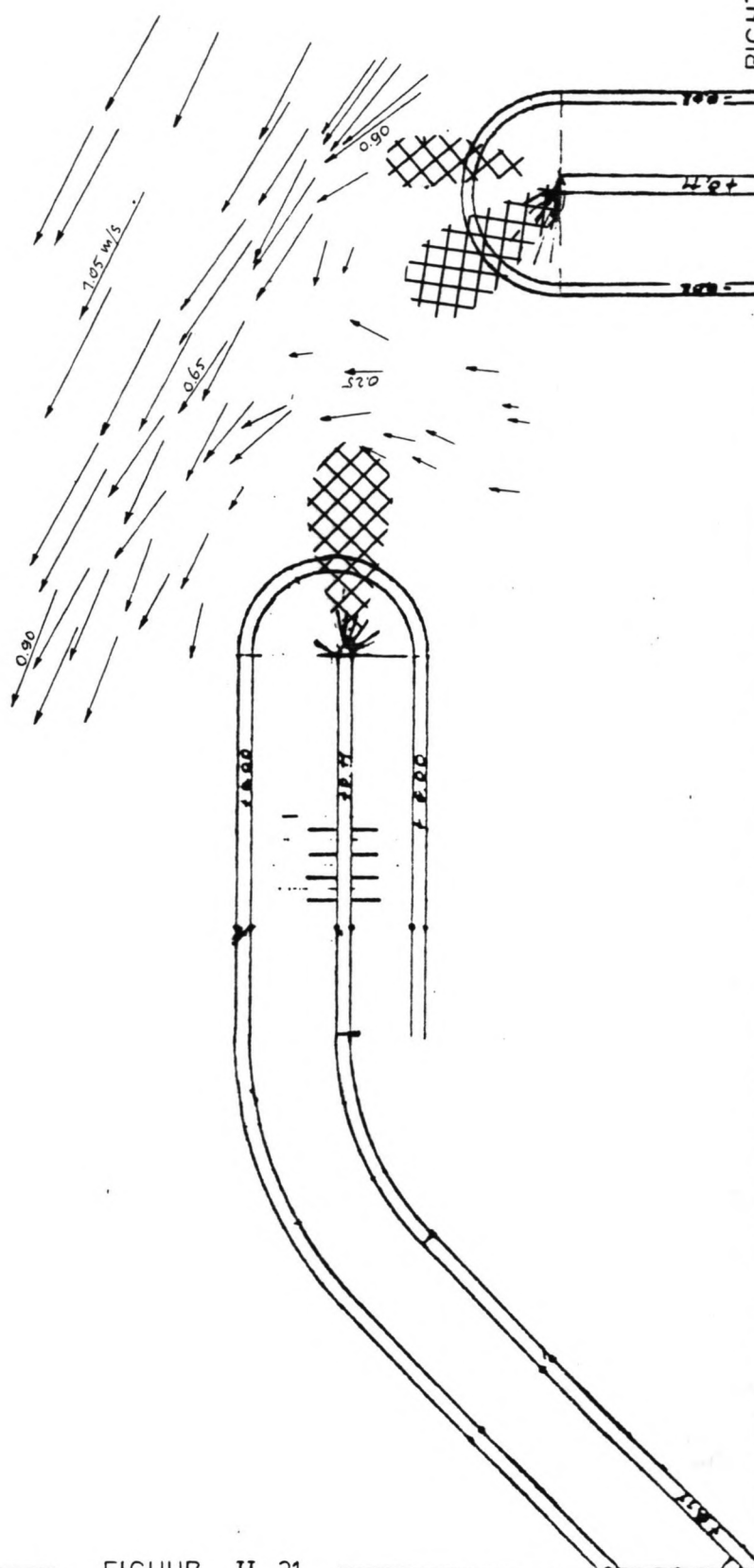
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STROOMBEELD

FIGUUR II.20



RICHTING OPP. STROOM →
 PROEFNUMMER: T 21 EB
 WATERSTAND NAP -0,15 m

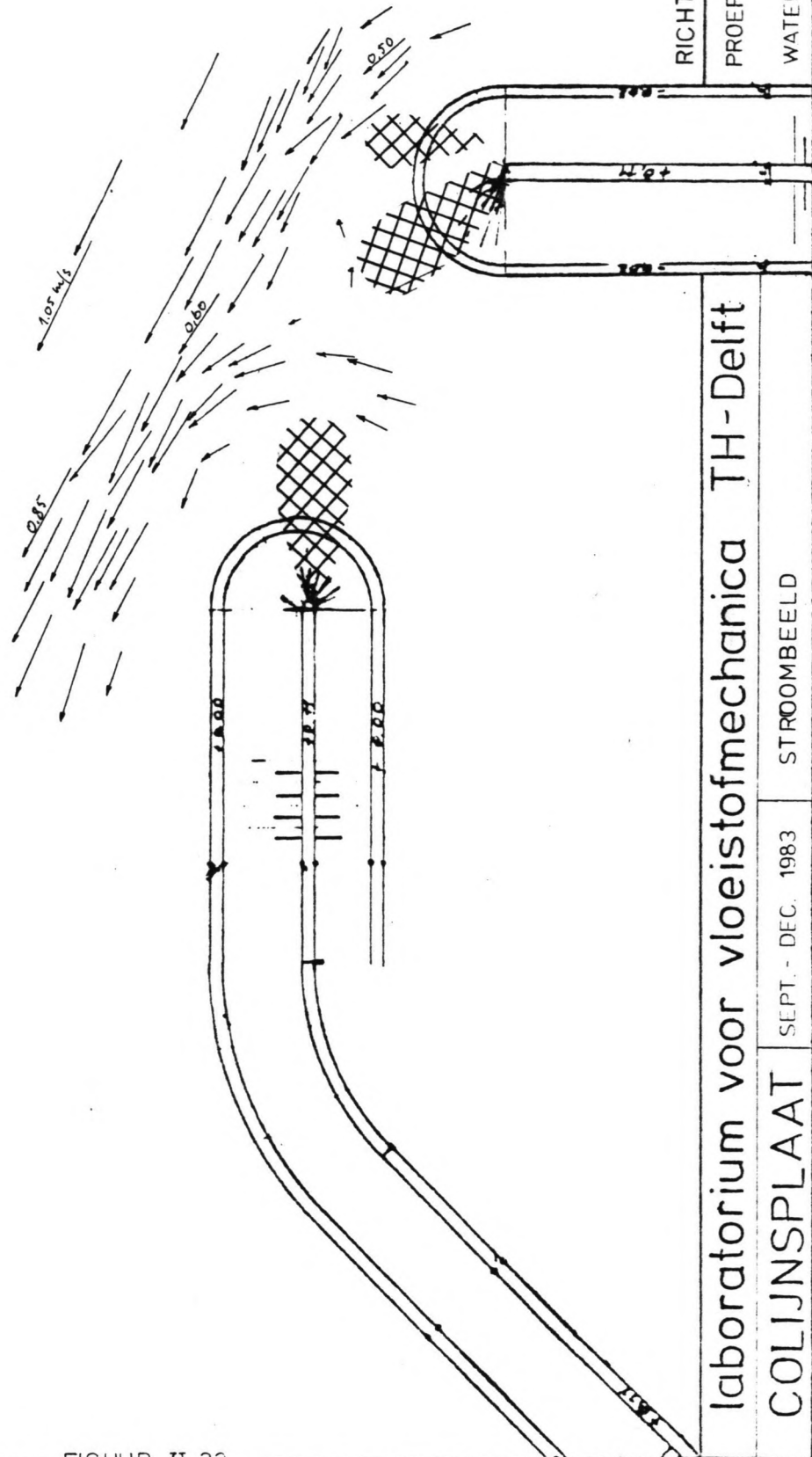
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FIGUUR II. 21



RICHTING OPP. STROOM →
 PROEFNUMMER: T 22 EB
 WATERSTAND : NAP - 0.80m

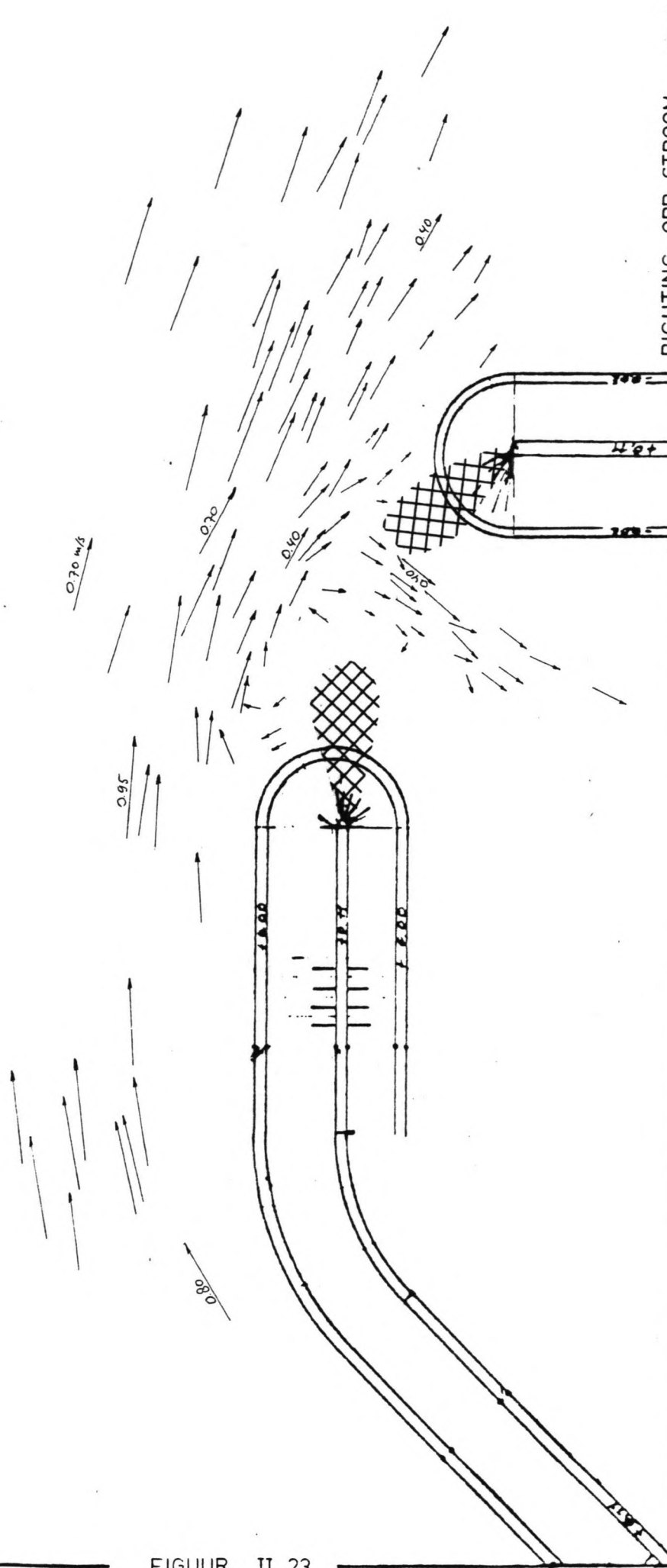
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FIGUUR II 22



RICHTING OPP. STROOM →
 PROEFNUMMER: T 23
 WATERSTAND : NAP +0,90 m

laboratorium voor vloeistofmechanica TH-Delft

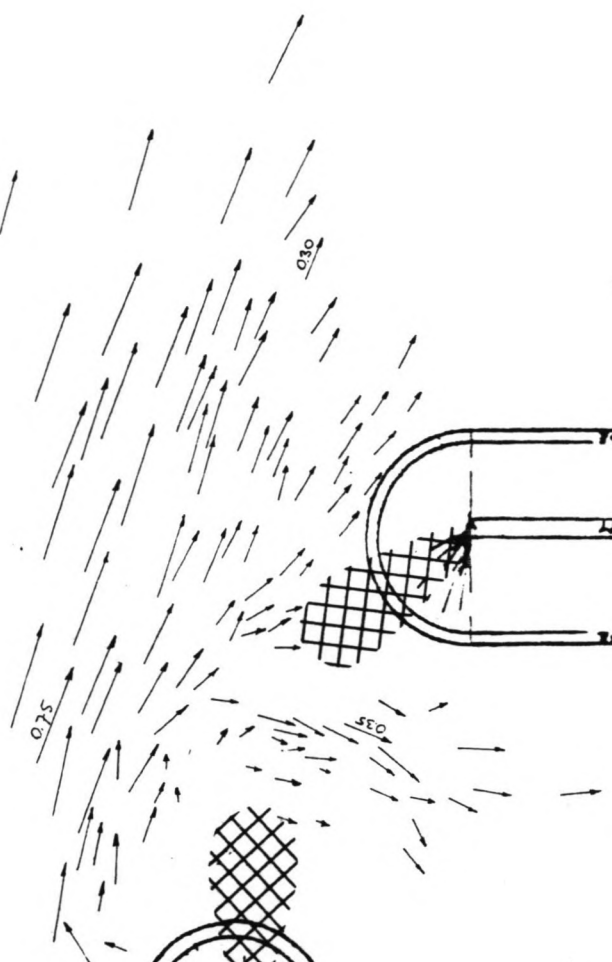
STROOMBEEELD

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FIGUUR II. 23

0.70 m/s



RICHTING OPP. STROOM

PROEFNUMMER: T 24

WATERSTAND : NAP +0,70 m

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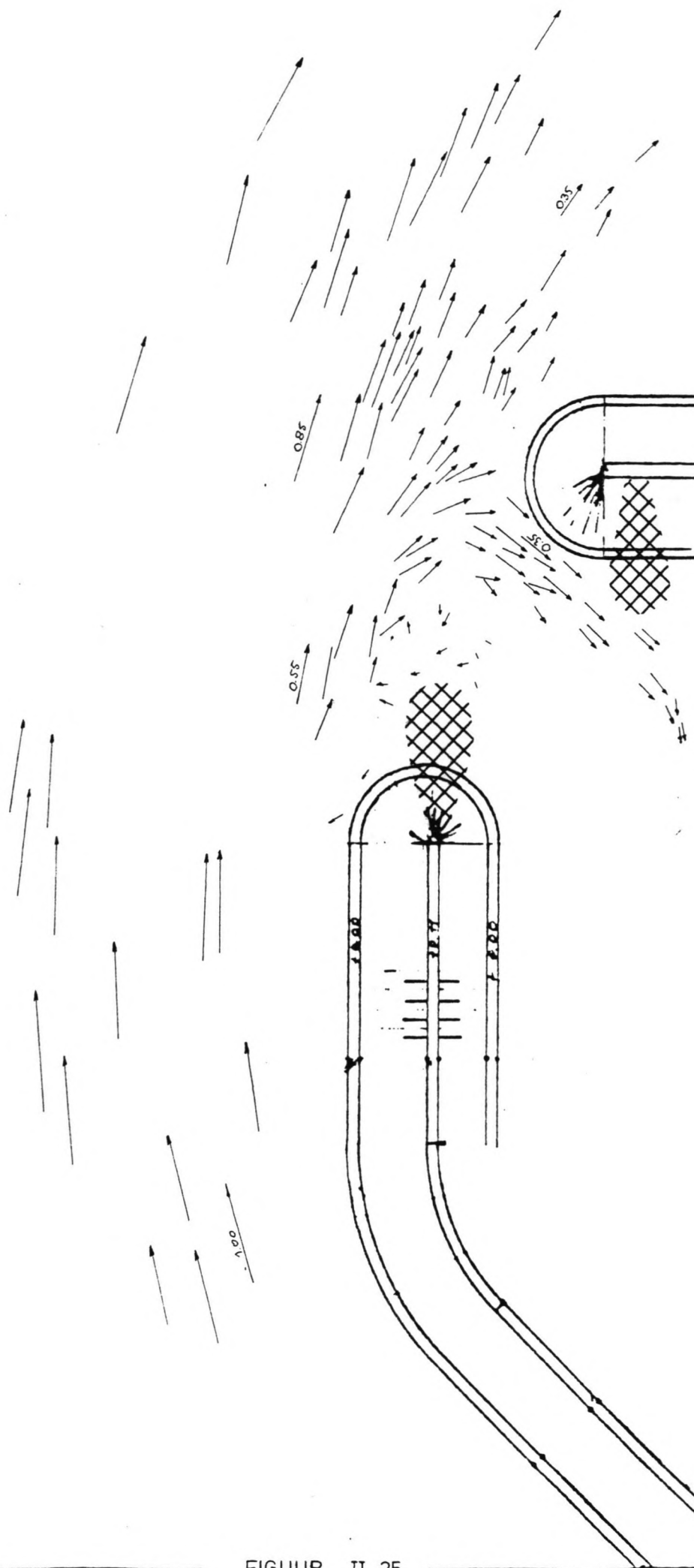
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STROOMBEELD

VLOED

FIGUUR II.24

1.00 m/s



RICHTING OPP. STROOM

PROEFNUMMER: T 25

WATERSTAND : NAP + 0,90 m

laboratorium voor vloeistofmechanica TH-Delft

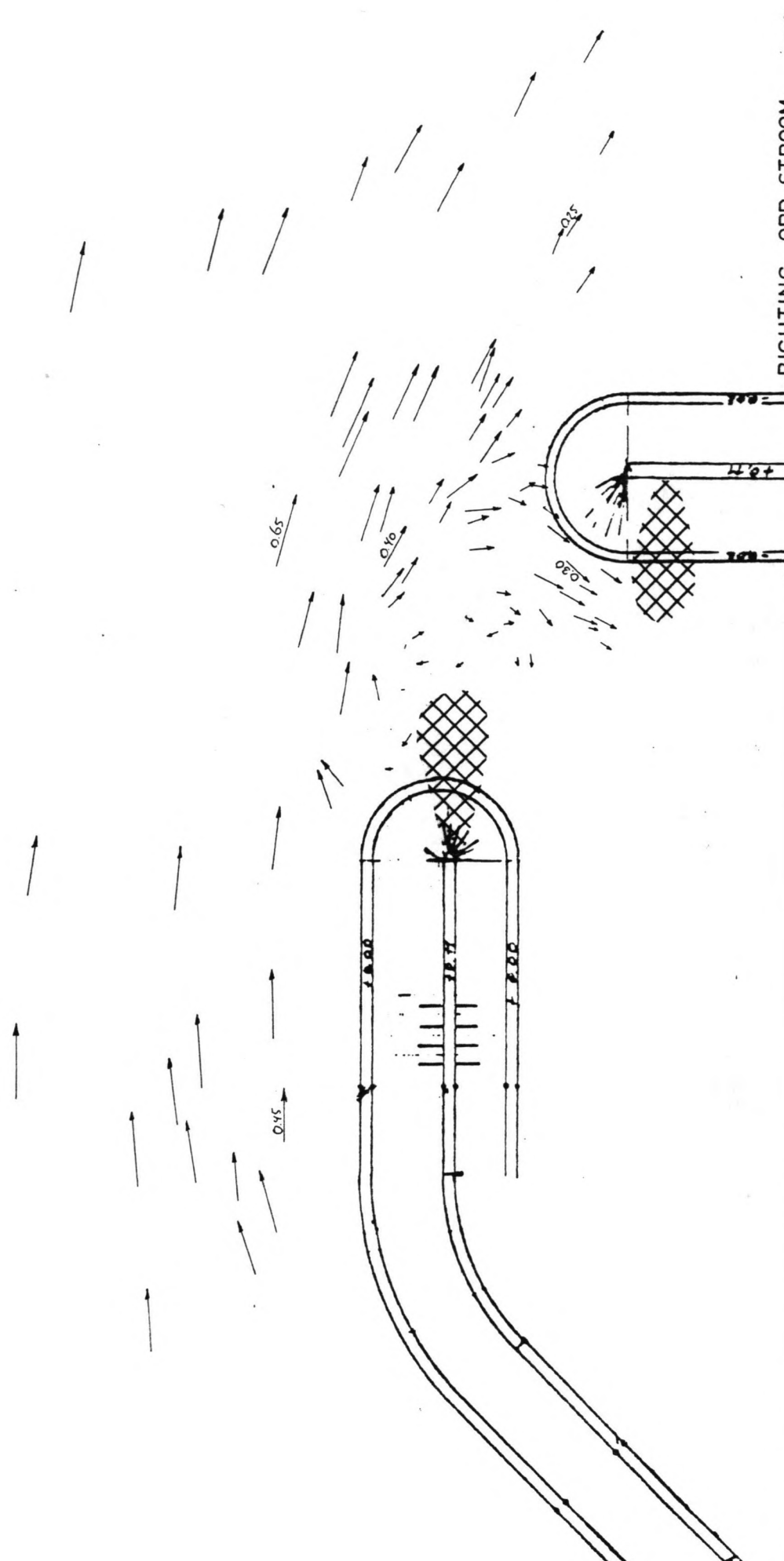
STROOMBEELD

SEPT. - DEC. 1983

COLIJNSPLAAT

VLOED

FIGUUR II. 25



RICHTING OPP. STROOM →

PROEFNUMMER: T 26

VLOED

WATERSTAND

NAP +0,70 m

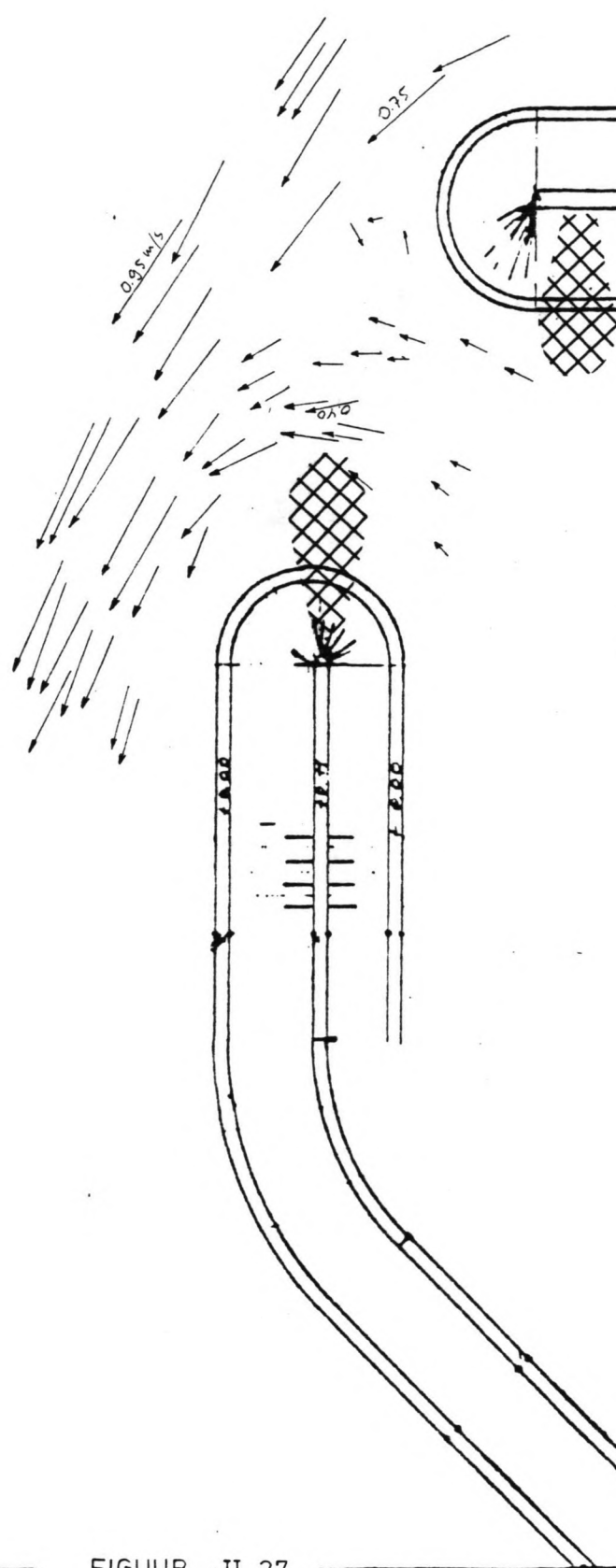
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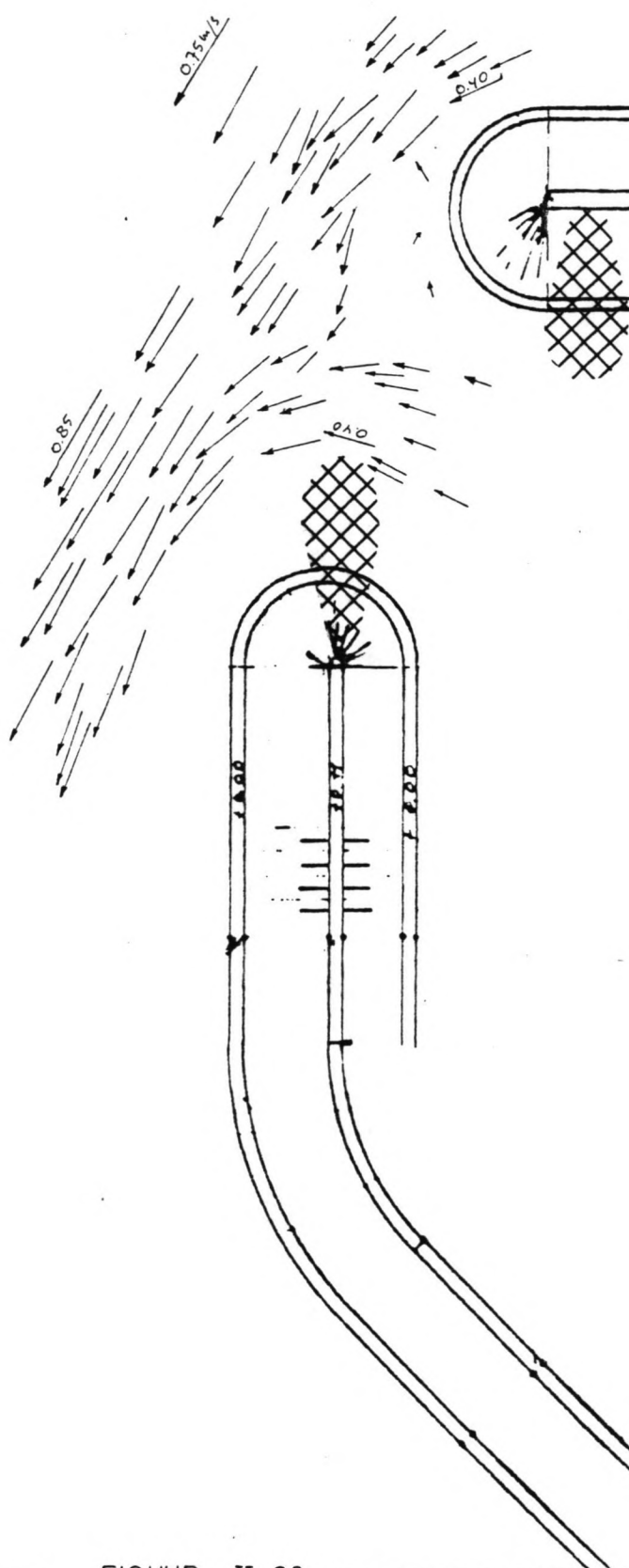
FIGUUR II 26



RICHTING OPP. STROOM →
 PROEFNUMMER: T 27 EB
 WATERSTAND NAP -0,15 m

laboratorium voor vloeistofmechanica TH-Delft
 COLIJNSPLAAT | SEPT. - DEC. 1983 | STROOMBEELD

FIGUUR II.27



RICHTING OPP. STROOM →
 PROEFNUMMER: T 28 EB
 WATERSTAND : NAP - 0,80 m

laboratorium voor vloeistofmechanica TH - Delft

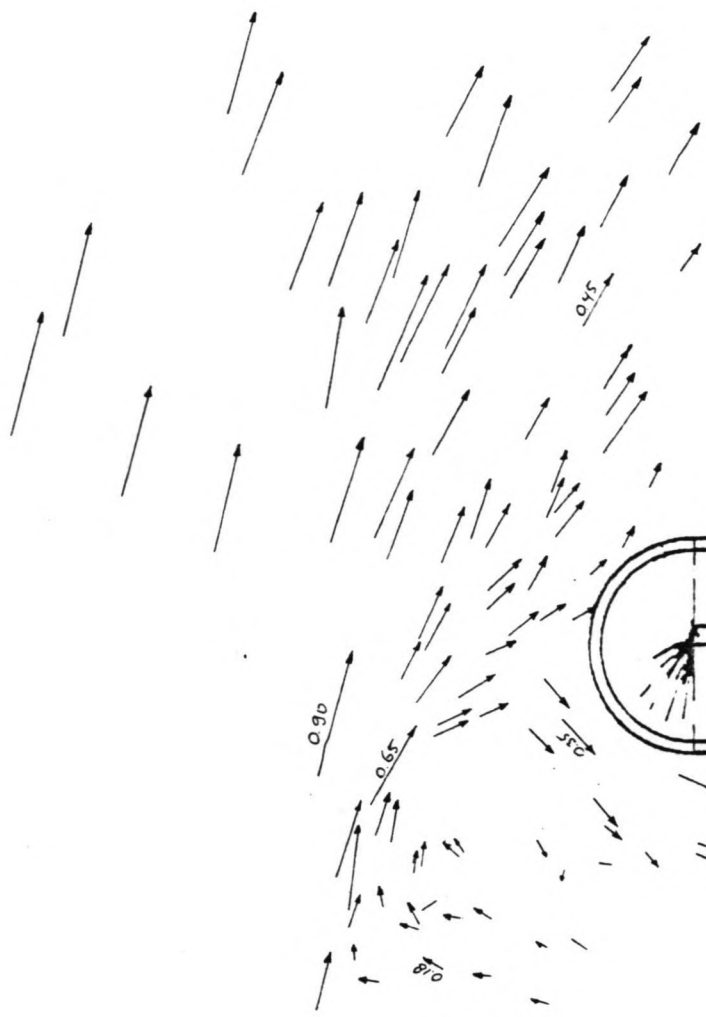
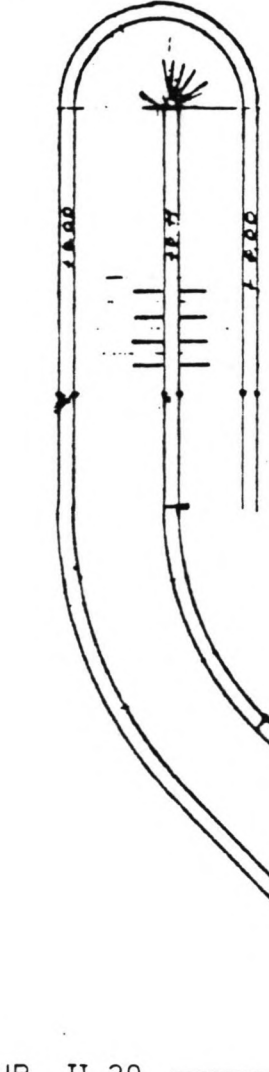
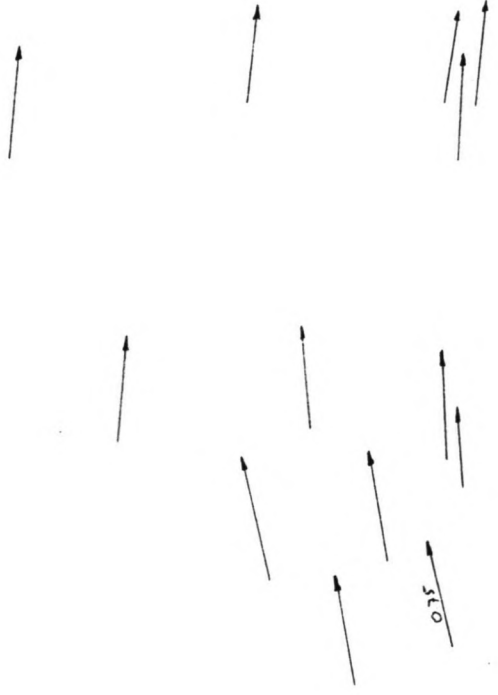
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FIGUUR II. 28

0.85 m/s



RICHTING OPP. STROOM

PROEFNUMMER: T 29

WATERSTAND : NAP +0,90 m

VLOED

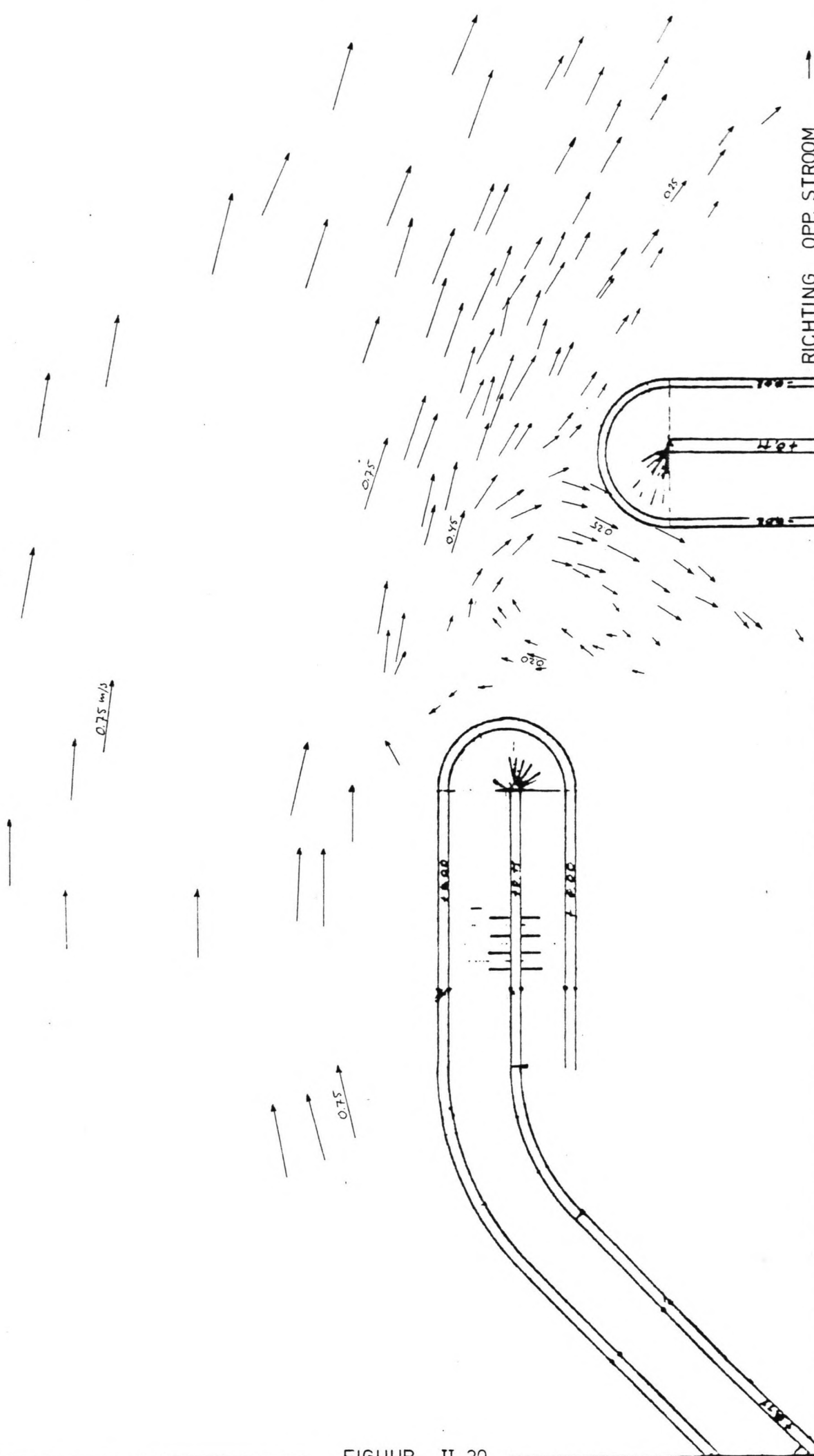
laboratorium voor vloeistofmechanica TH-Delft

COLIJNSPLAAT

SEPT. - DEC. 1983

STROOMBEELD

FIGUUR II.29



RICHTING OPP. STROOM →

PROEFNUMMER: T 30

WATERSTAND NAP + 0,70 m

laboratorium voor vloeistofmechanica TH-Delft

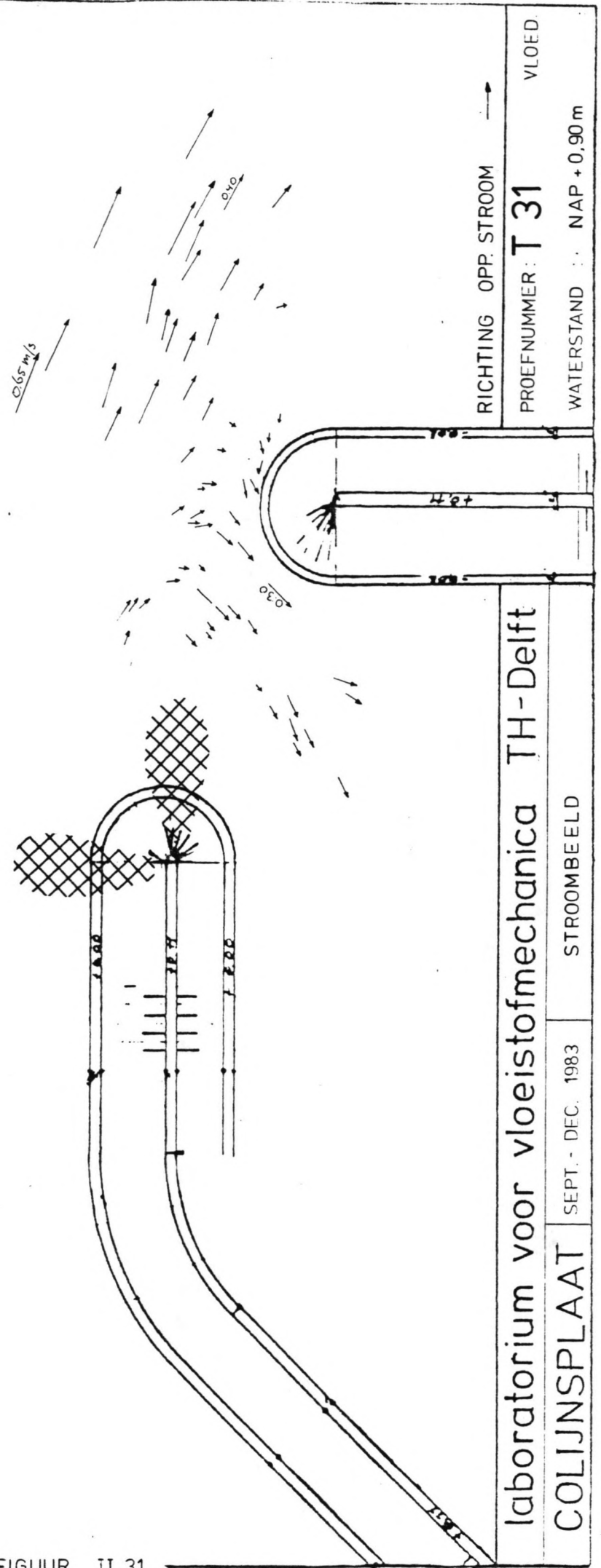
COLIJNSPLAAT

SEPT. - DEC. 1983

STROOMBEELD

VLOED

FIGUUR II 30



RICHTING OPP. STROOM →
 PROEFNUMMER: T 31
 WATERSTAND: NAP + 0.90 m
 VLOED

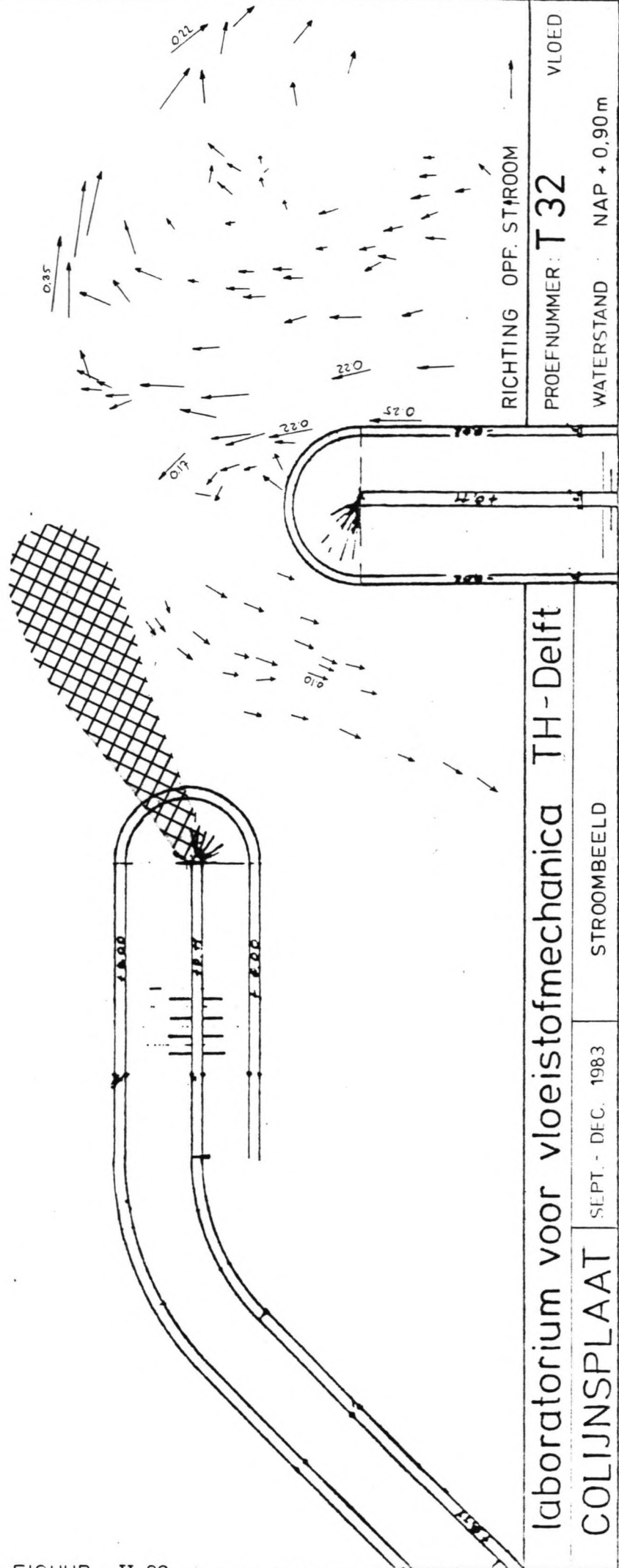
laboratorium voor vloeistofmechanica TH-Delft

COLIJNSPLAAT

SEPT. - DEC. 1983

STROOMBEELD

FIGUUR II.31



laboratorium voor vloeistofmechanica TH-Delft

COLIJNSPLAAT

SEPT. - DEC. 1983

STROOMBEELD

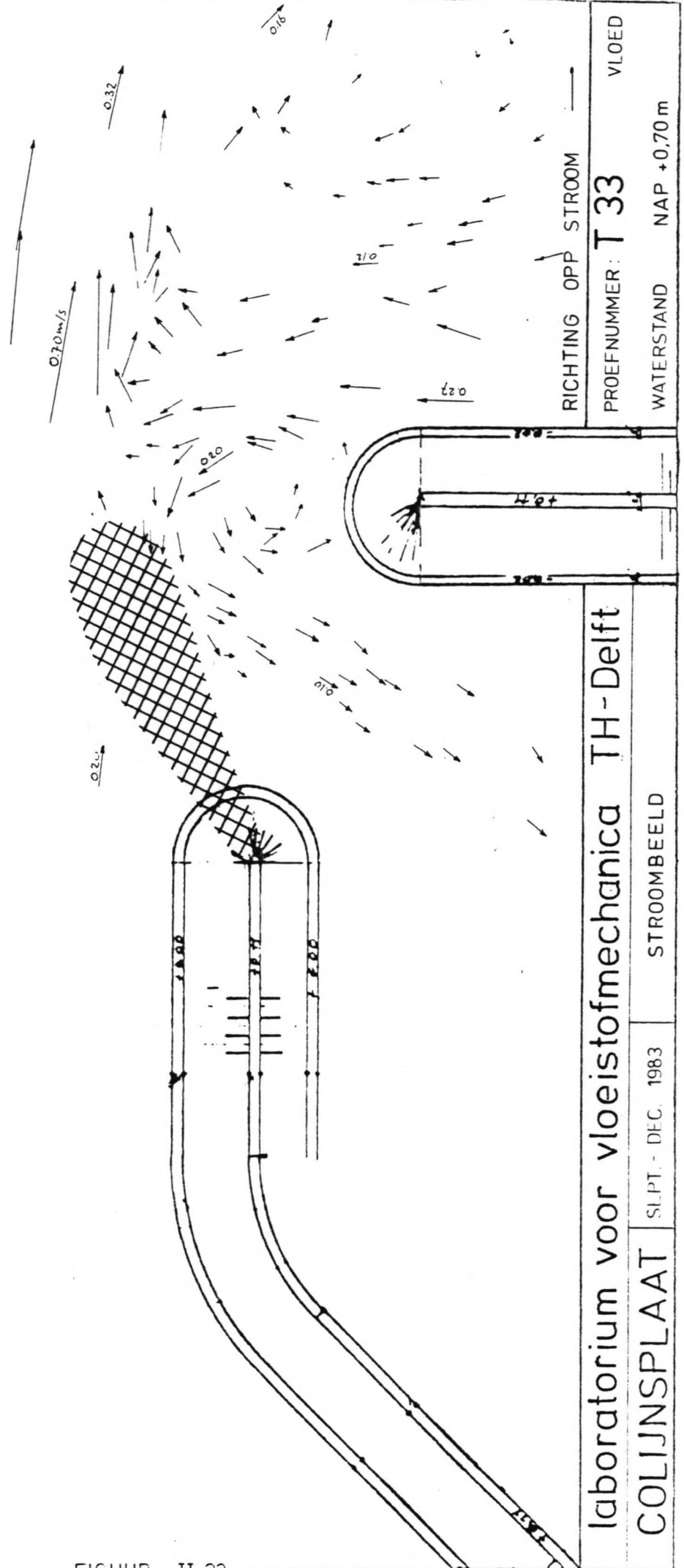
PROEFNUMMER: T32

WATERSTAND NAP + 0.90 m

RICHTING OPF. STROOM

VLOED

FIGUUR II.32



laboratorium voor vloeistofmechanica TH-Delft

COLIJNSPLAAT

SLIPT. - DEC. 1983

STROOMBEELD

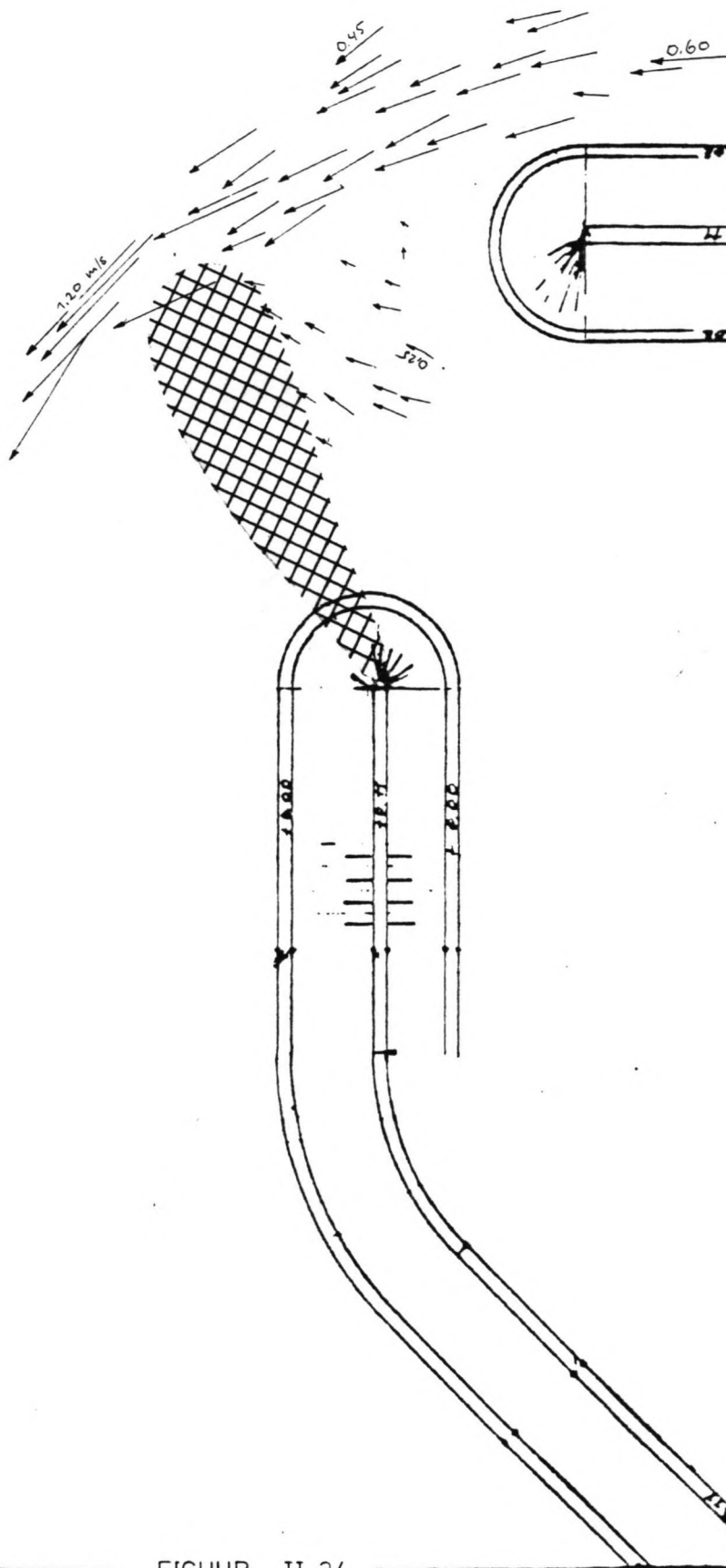
RICHTING OP STROOM

PROEFNUMMER: T 33

WATERSTAND NAP +0.70 m

VLOED

FIGUUR II.33



RICHTING OPP. STROOM →

PROEFNUMMER: T.34 EB.

WATERSTAND: NAP - 0,15 m

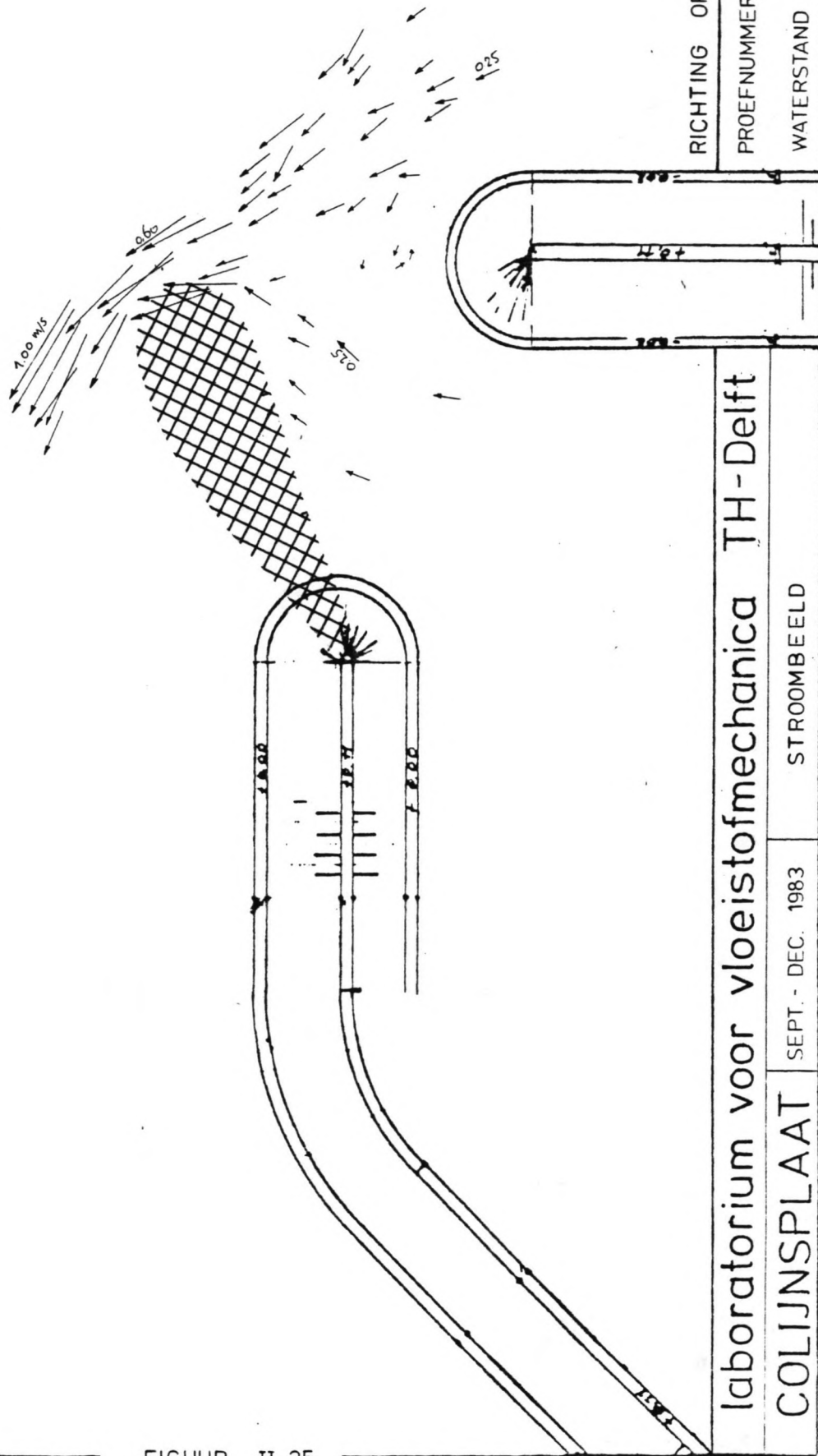
laboratorium voor vloeistofmechanica TH-Delft

STROOMBEELD

SEPT. - DEC. 1983

COLIJNSPLAAT

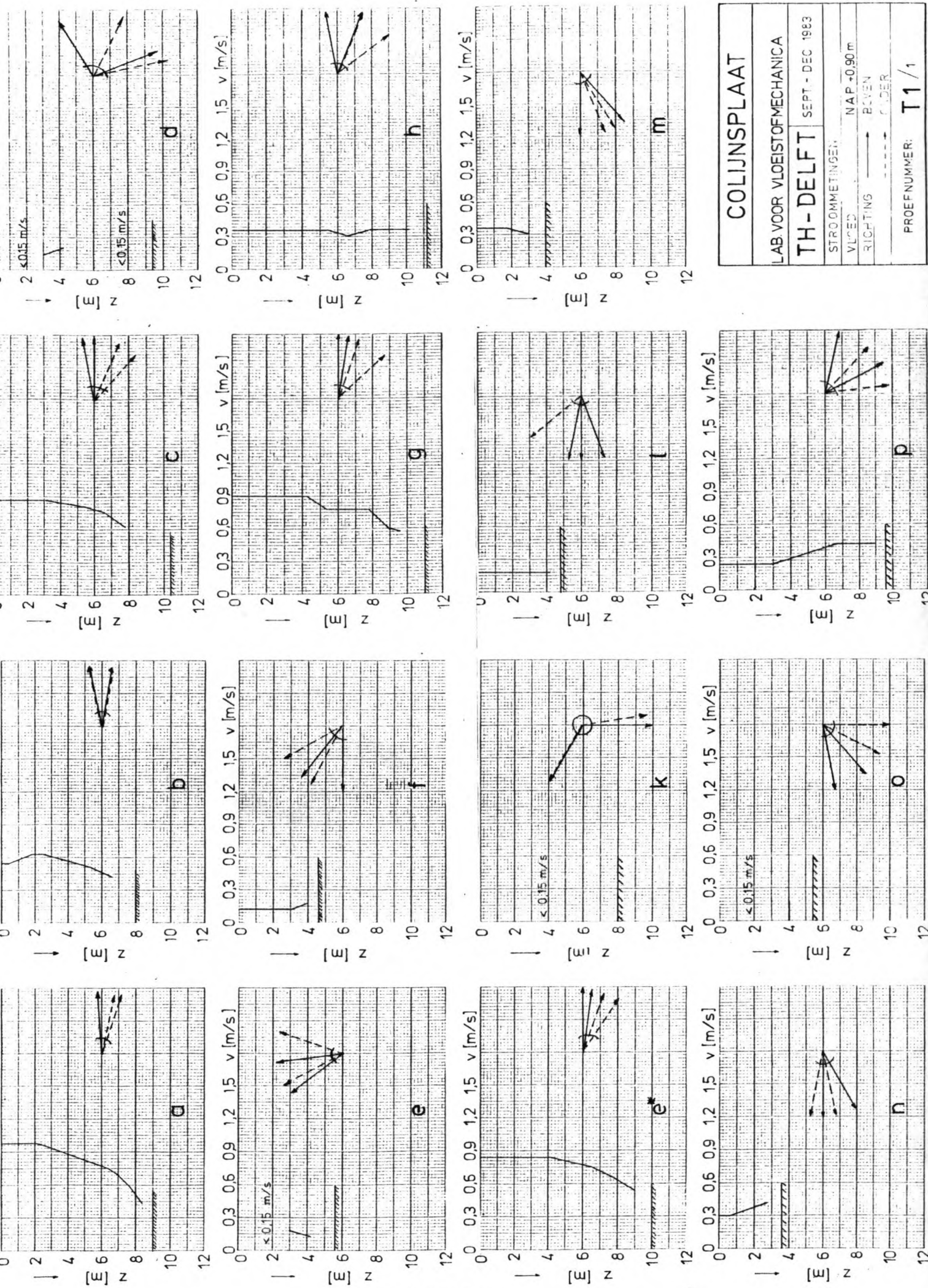
FIGUUR II.34



FIGUUR II. 35

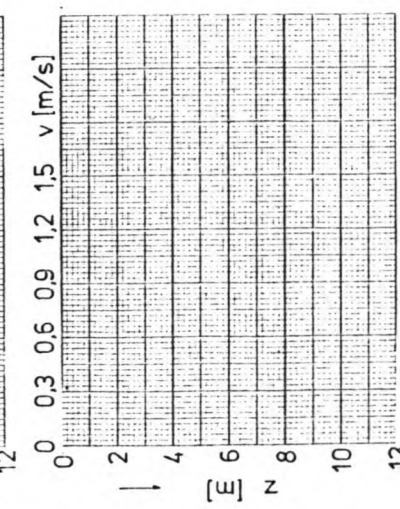
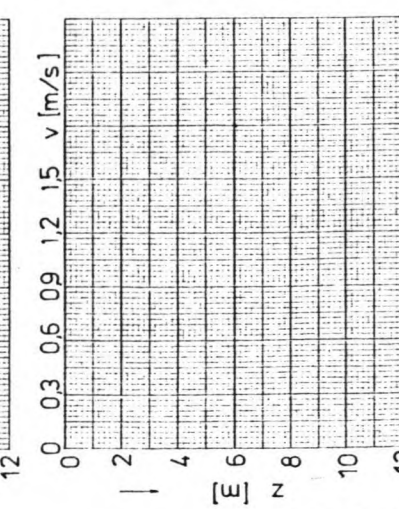
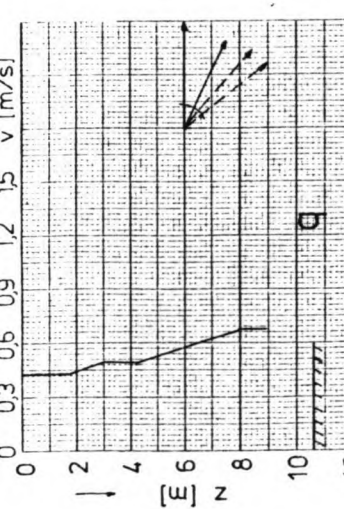
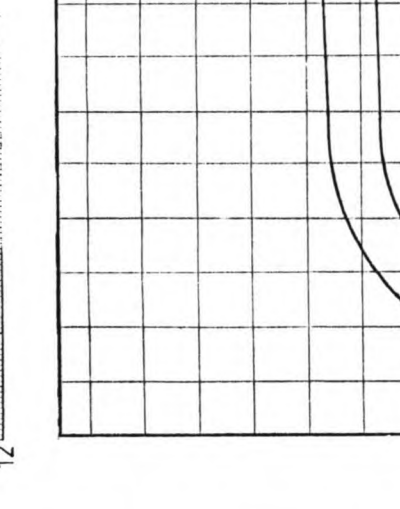
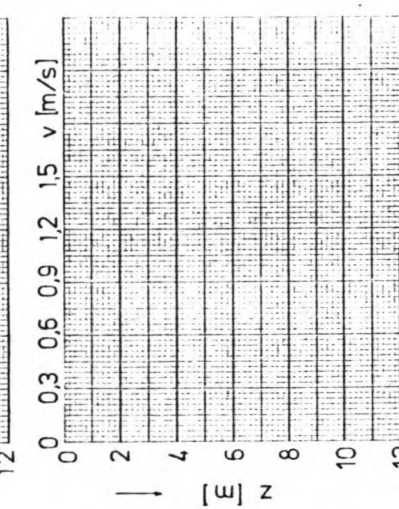
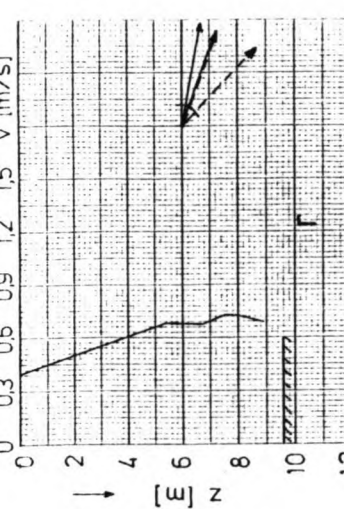
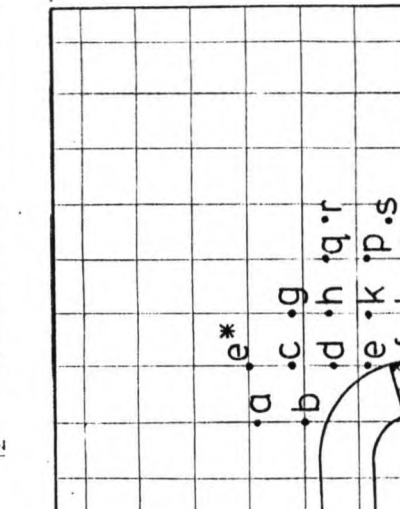
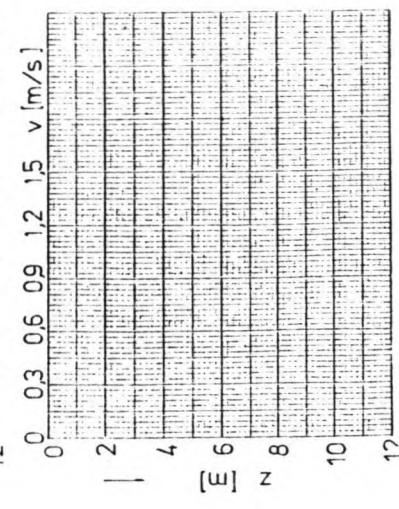
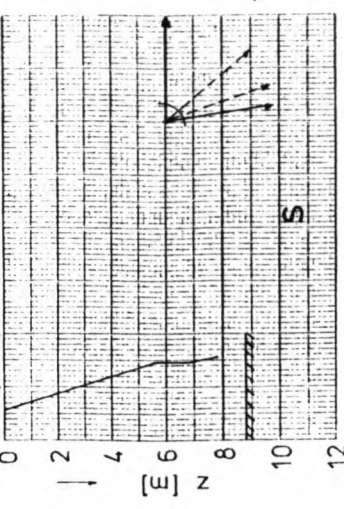
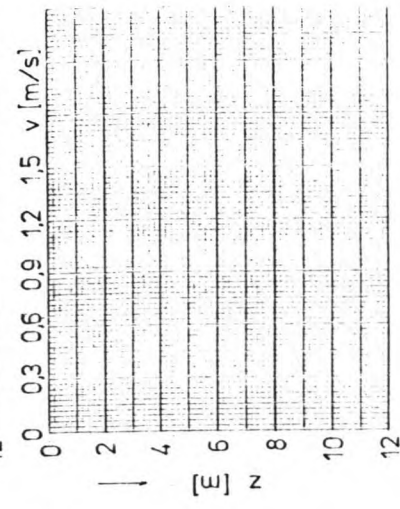
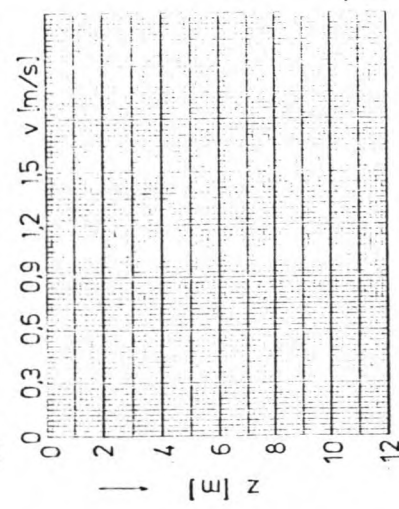
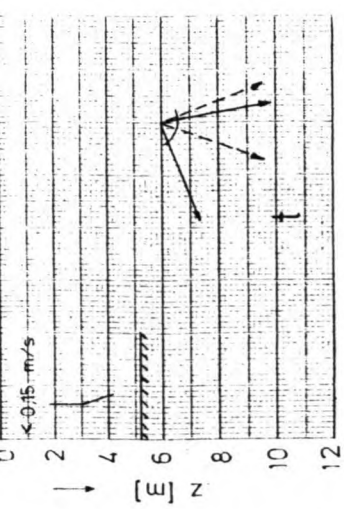
BIJLAGE III

STROOMMETINGEN IN HET MODEL

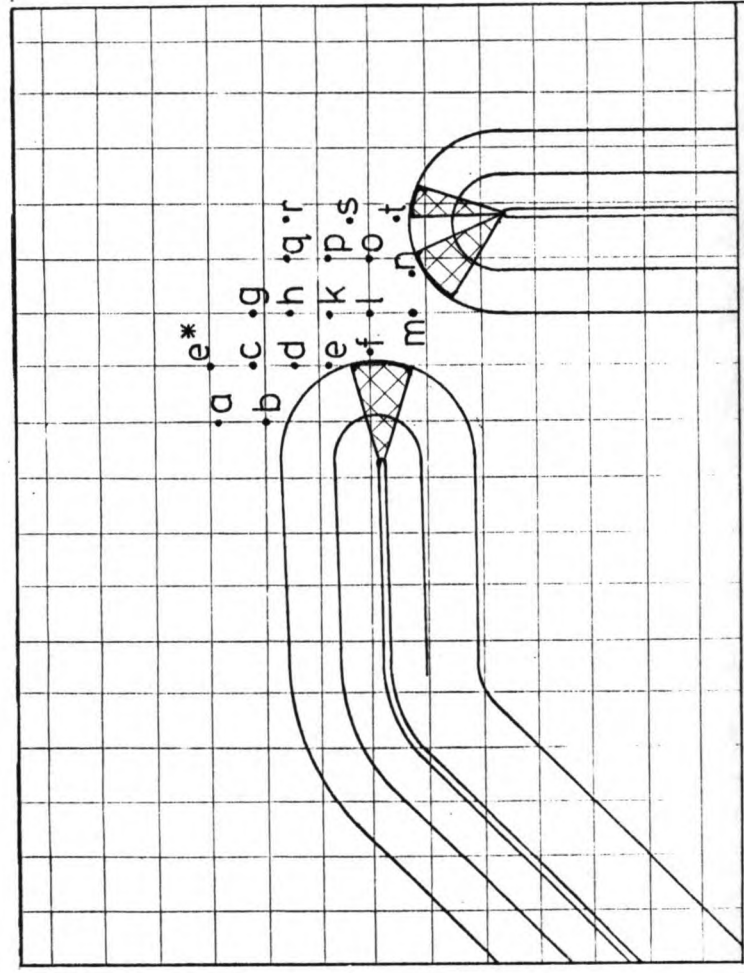


COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT	SEPT - DEC 1983
STROOMMETINGEN:	
VLEED	NAP $\pm 0.90 \text{ m}$
RICHTING	→ Boven --- Onder
PROEFNUMMER:	T1/1

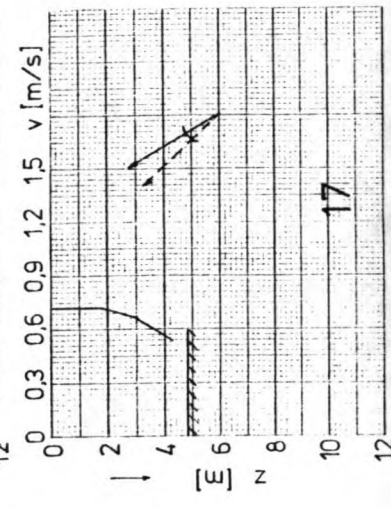
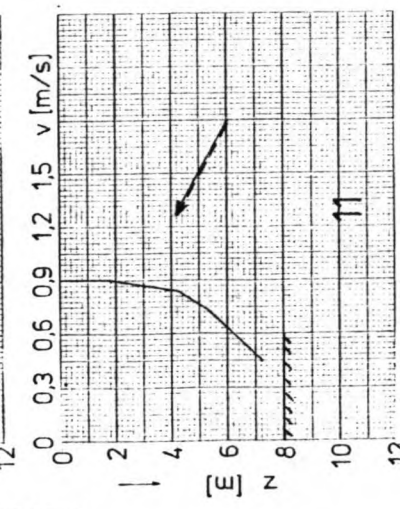
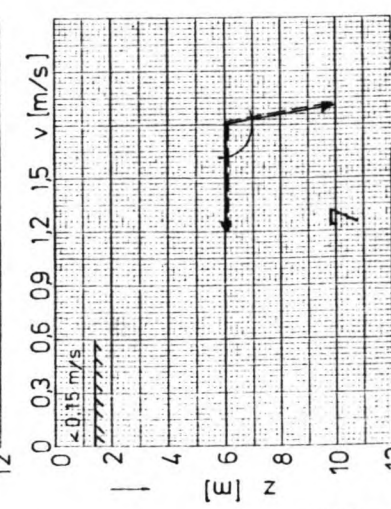
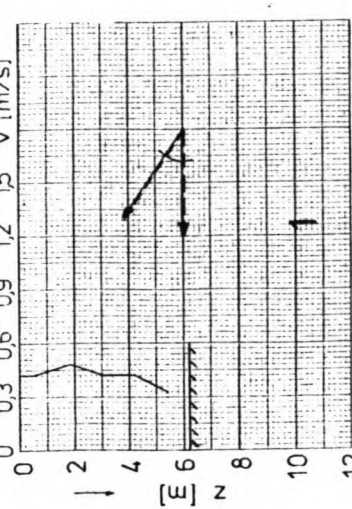
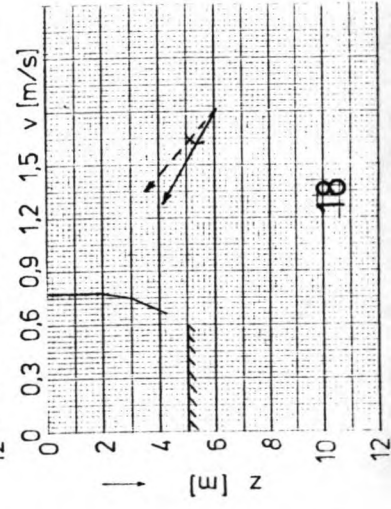
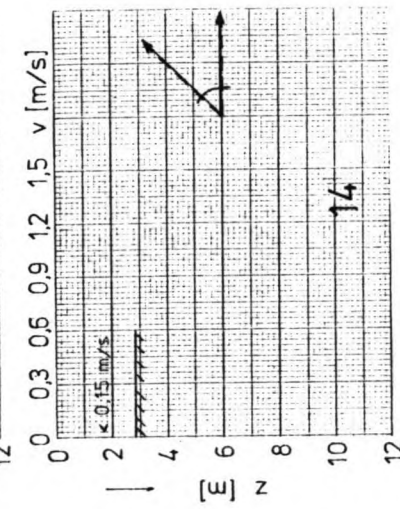
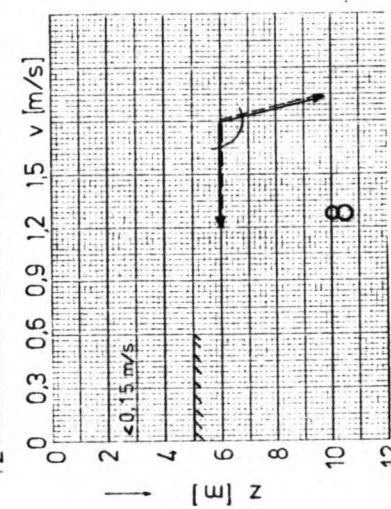
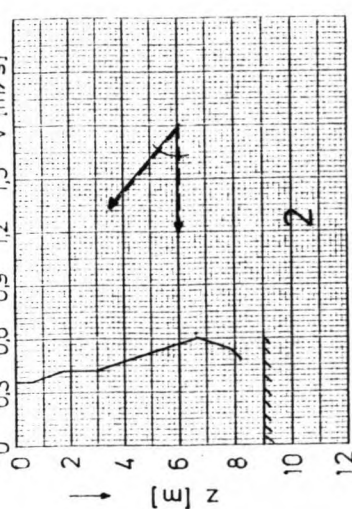
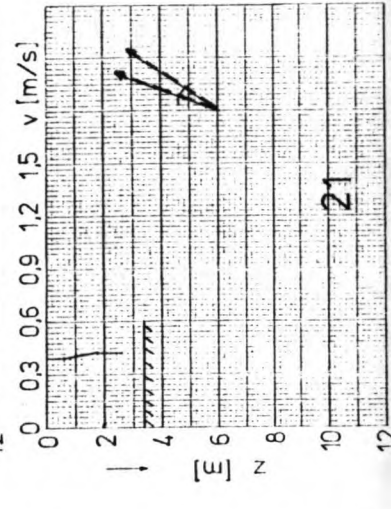
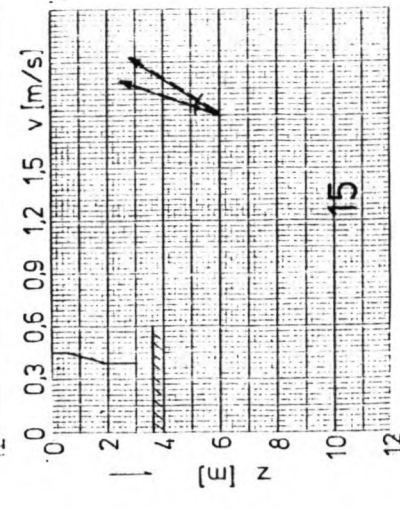
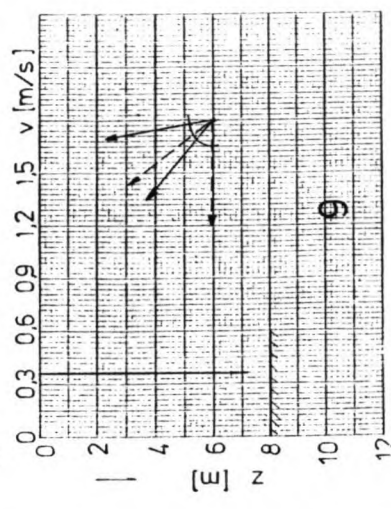
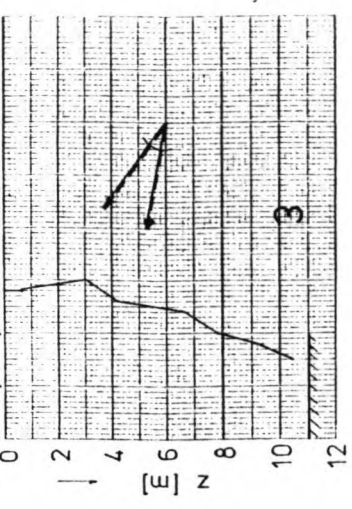
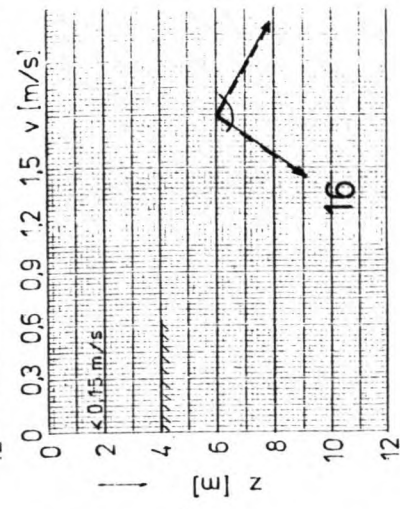
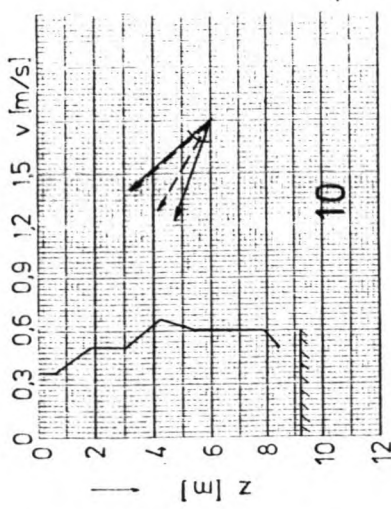
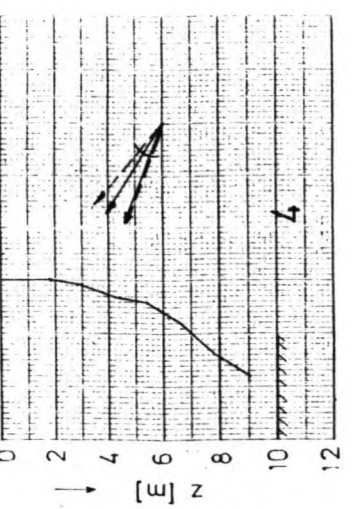
FIGUUR III.1



COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH - DELFT	SEPT - DEC 1983
STROOMMETINGEN	NAP +0,90 m
VLOED	BOVEN →
RICHTING	→ - - - - - →
ONDER	← - - - - - ←
PROEFNUMMER:	T1 / 2

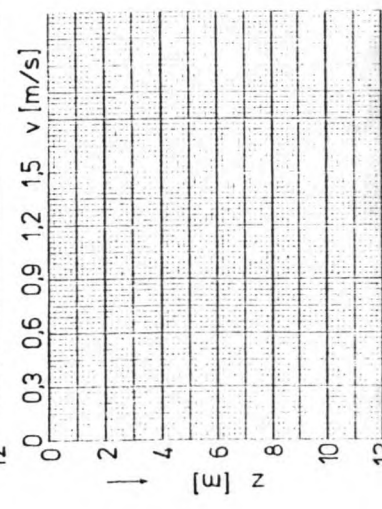
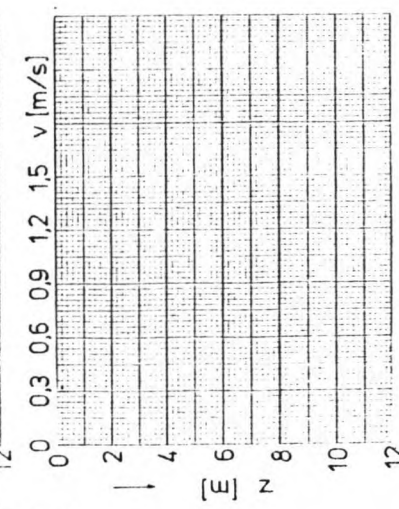
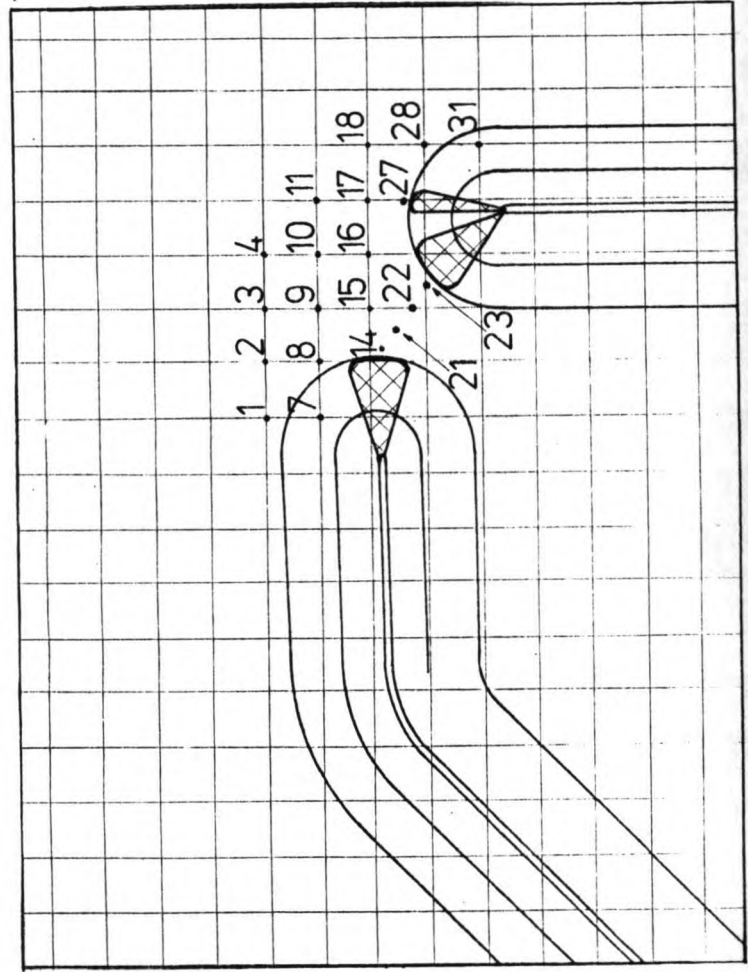
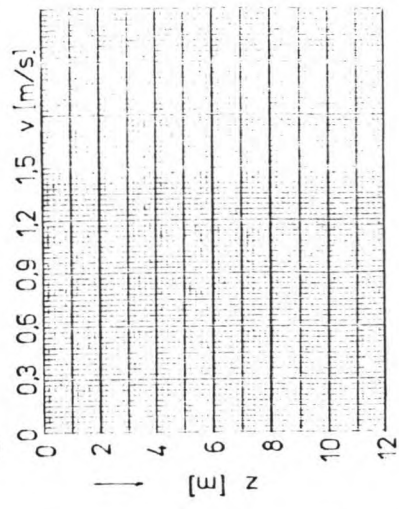
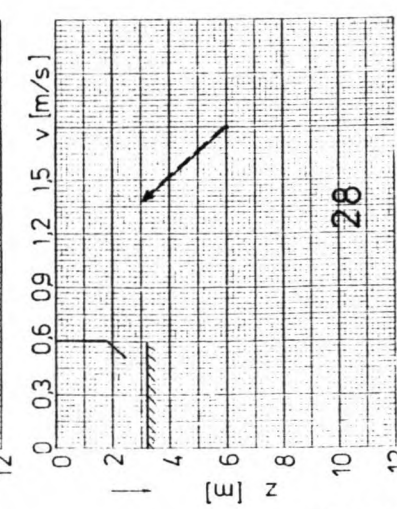
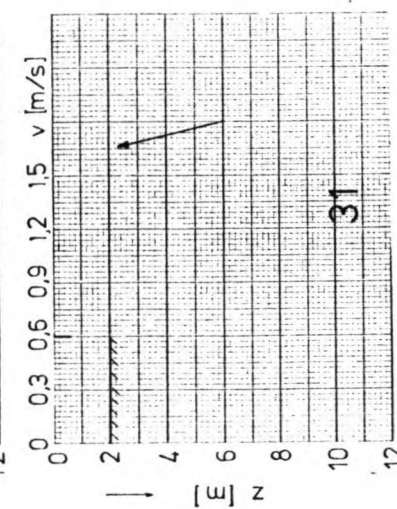
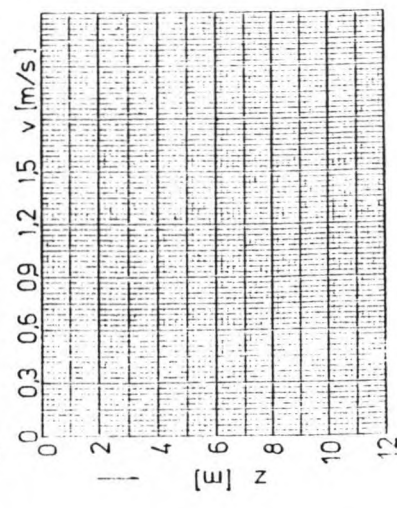
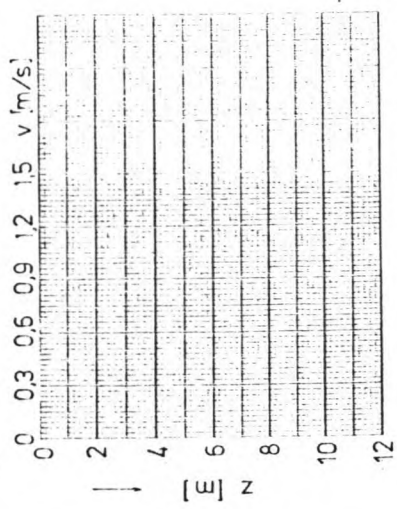
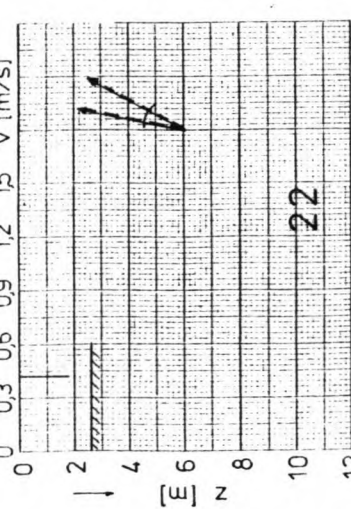
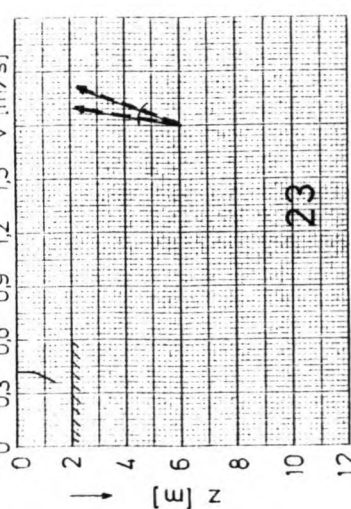
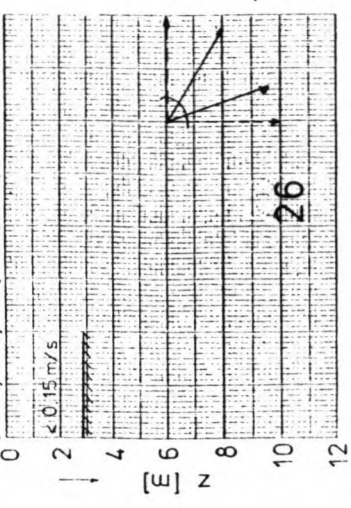
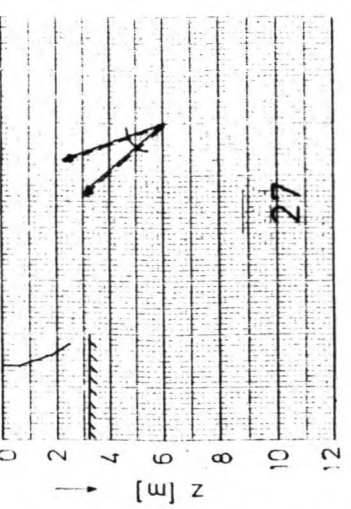


FIGUUR III.2



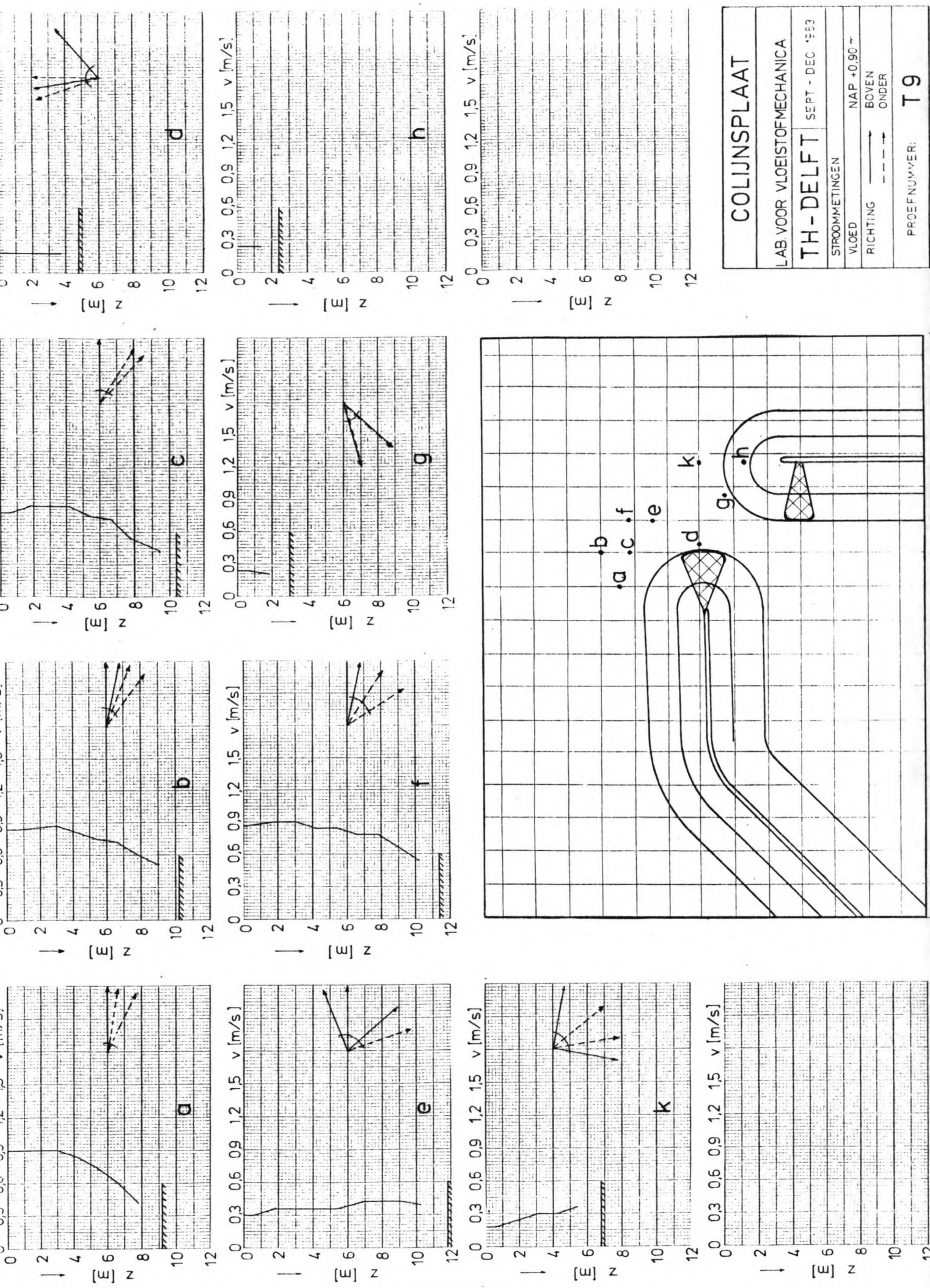
COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT	SEPT - DEC '83
STROOMMETINGEN	
EB	NAP - 0.15 m
RICHTING	BOVEN - - - - - ONDER - - - - -
PROEFNUMMER: T4 / 1	

FIGUUR III.3



COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT	SEPT - DEC 1983
STROOMMETINGEN	
EB	NAP - 0,15 m
RICHTING	→ BOVEN - - - ONDER
PROEFNUMMER: T4 / 2	

FIGUUR III.4



COLIJNSPLAAT

LAB VOOR VLOEISTOFMECHANICA

TH-DELFT SEPT - DEC '93

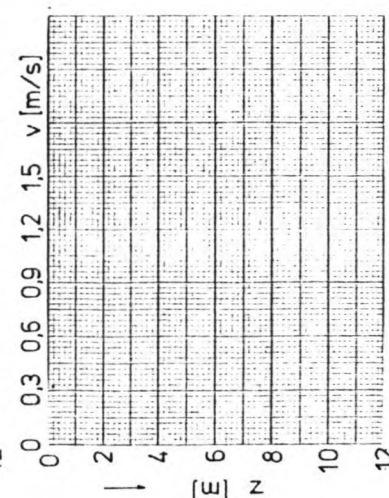
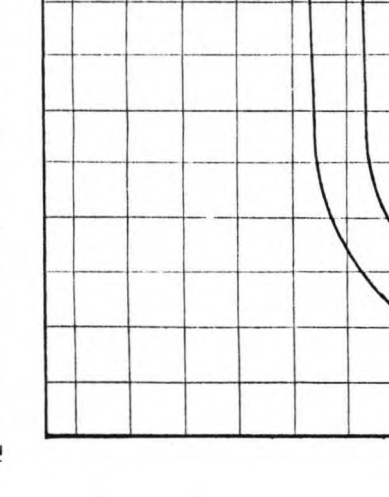
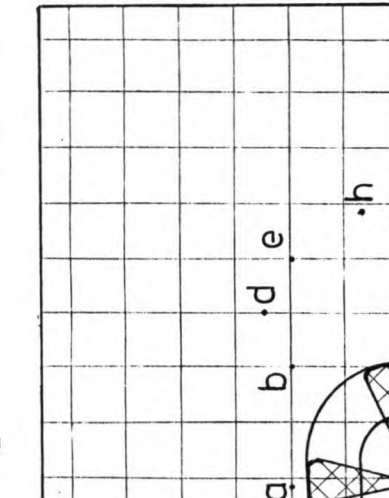
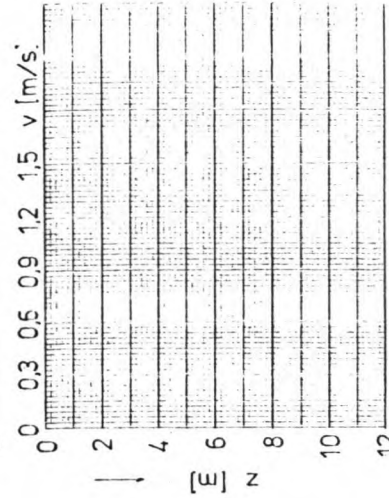
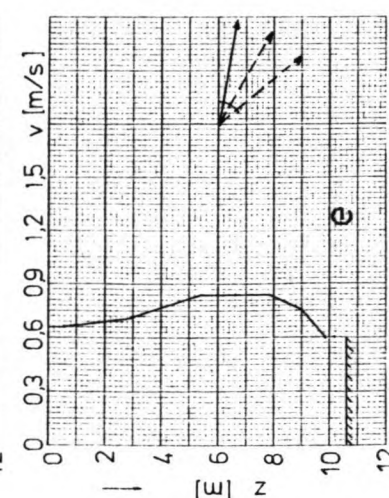
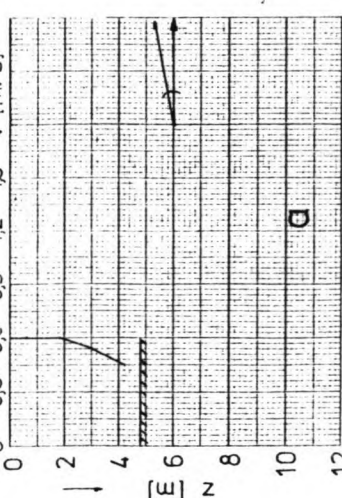
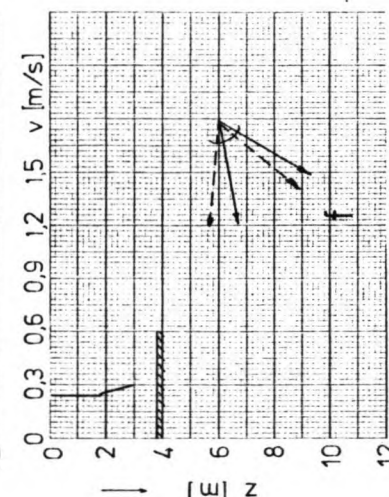
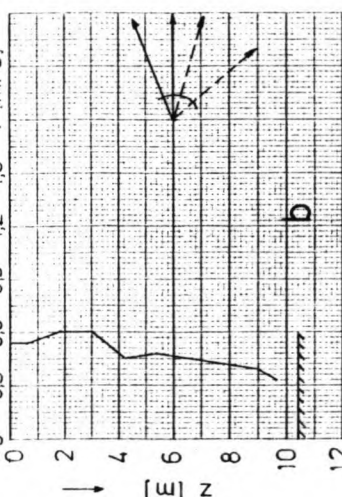
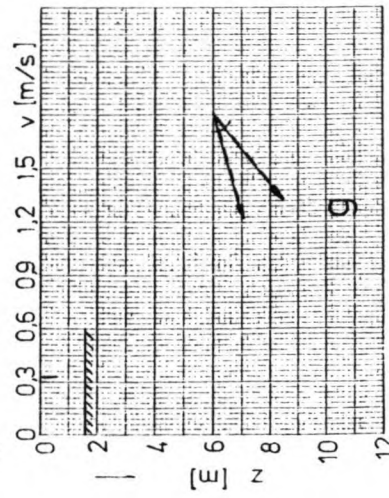
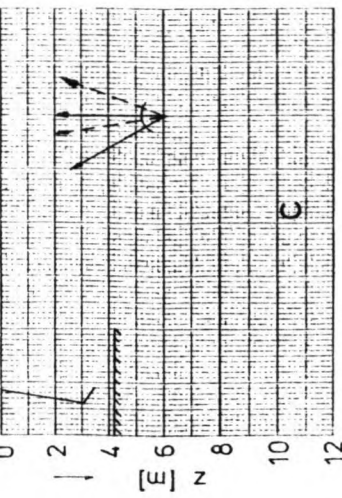
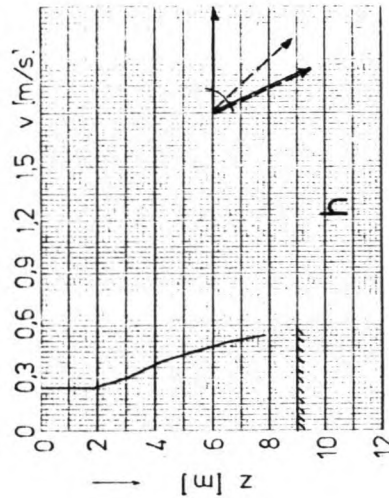
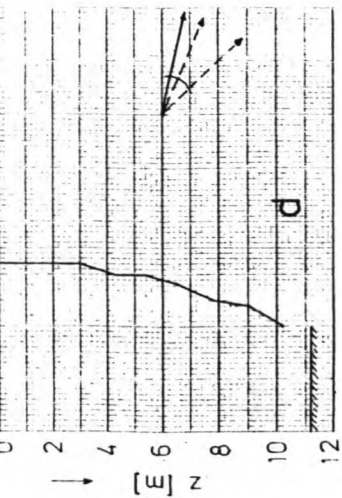
STROOMMETINGEN

VLOED NAP +0.90 m

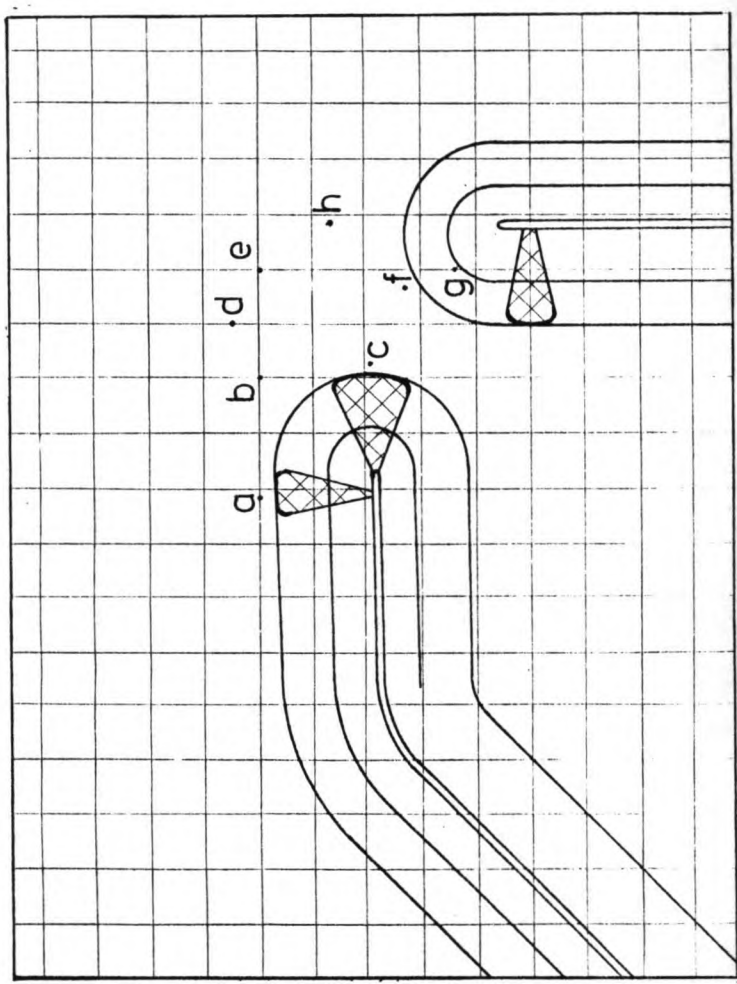
RICHTING \longrightarrow BOVEN \dashrightarrow ONDER

PROEFNUMMER: T9

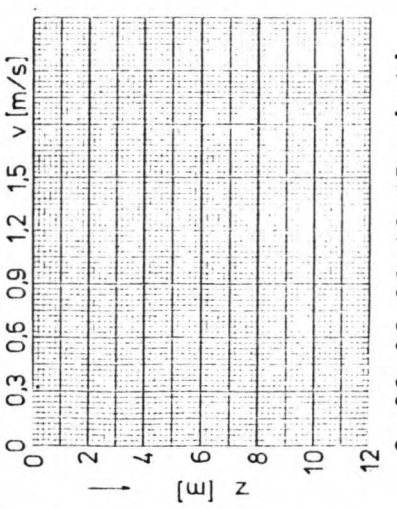
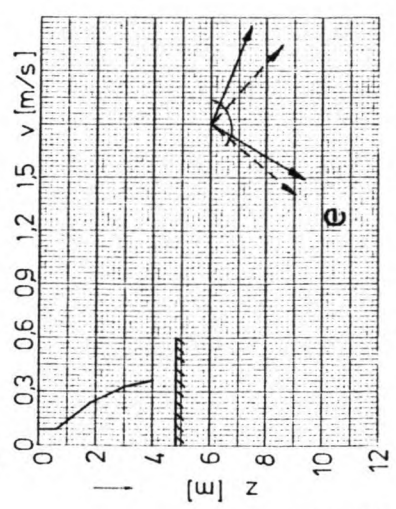
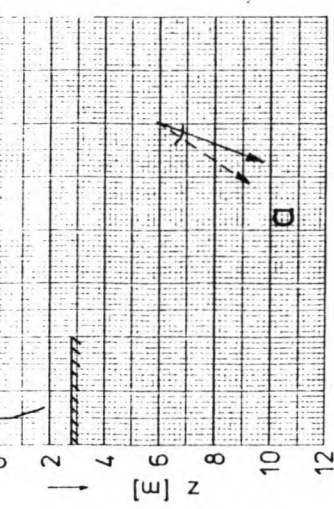
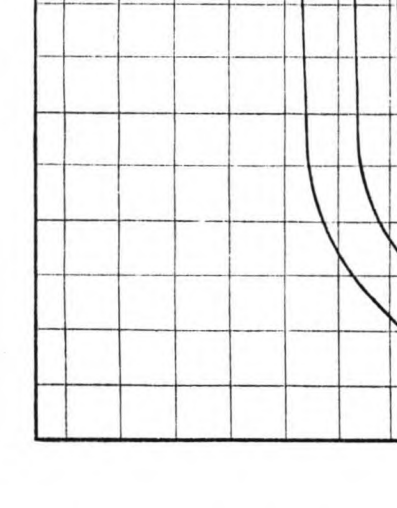
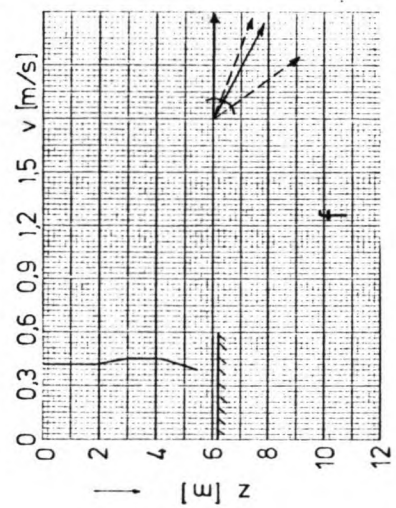
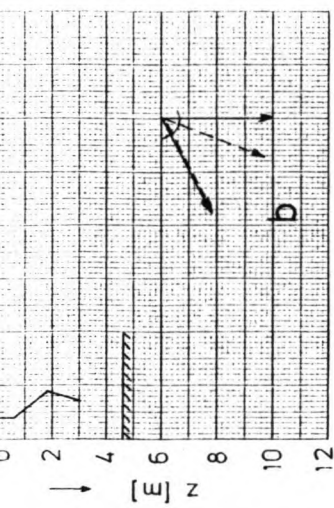
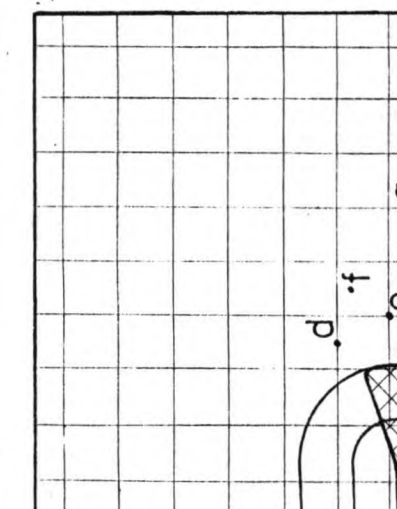
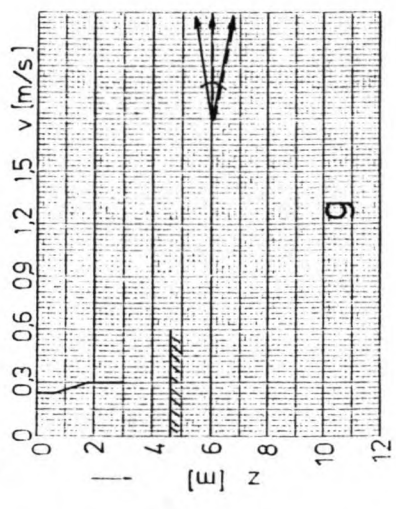
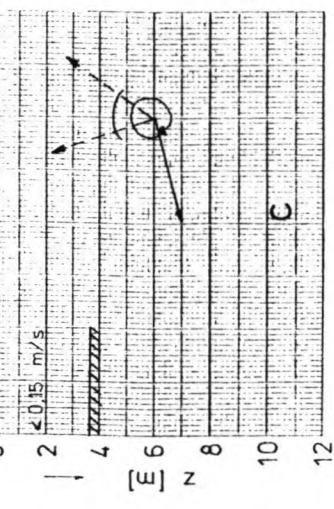
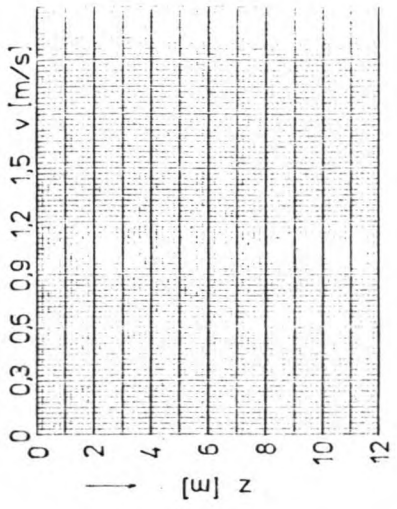
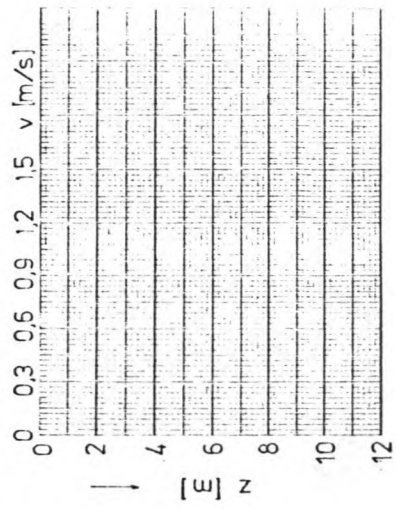
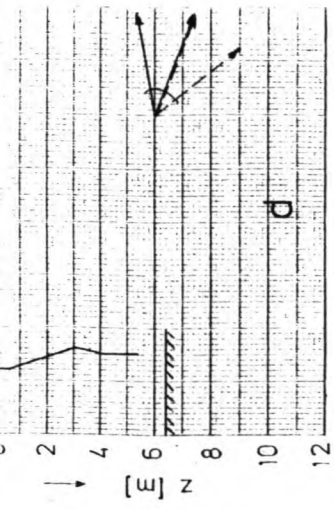
FIGUUR III 5



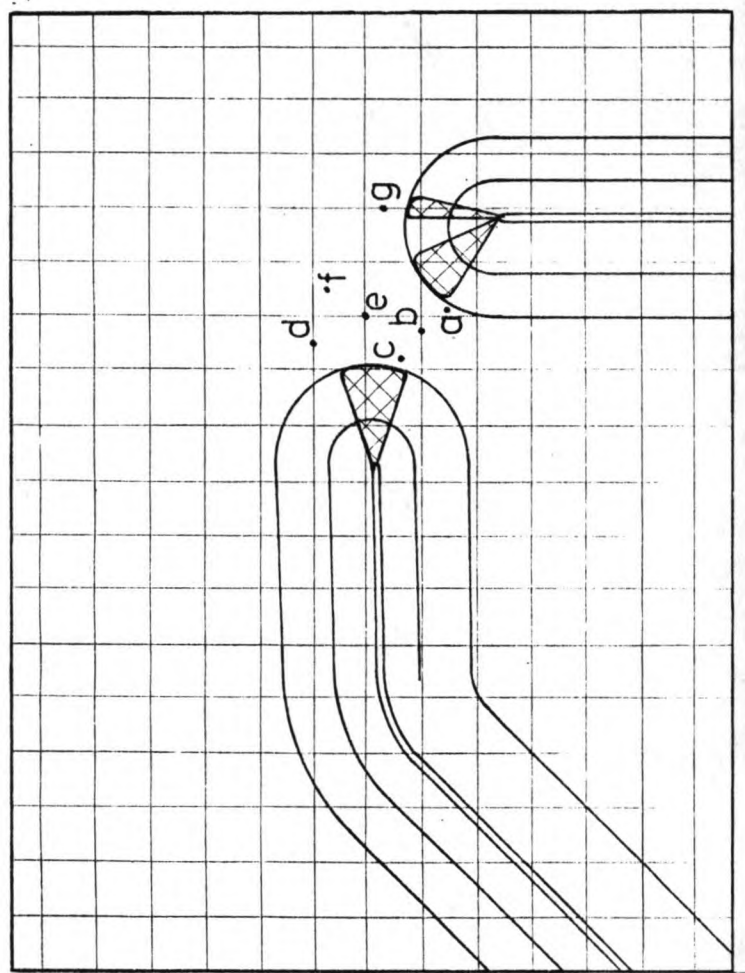
COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-Delft	SEPT - DEC '83
STROOMMETINGEN	
V. DEEN	NAP +0.90m
K. SCHILLIG	BOVEN
-----	ONDER
PROEFNUMMER:	T17



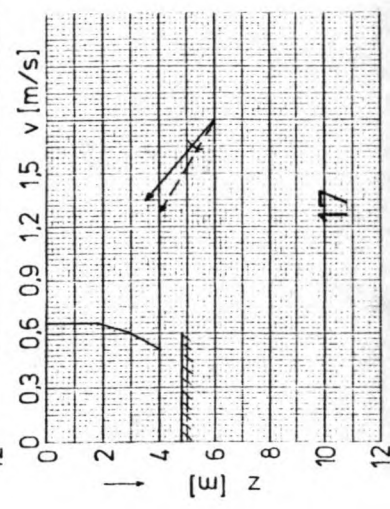
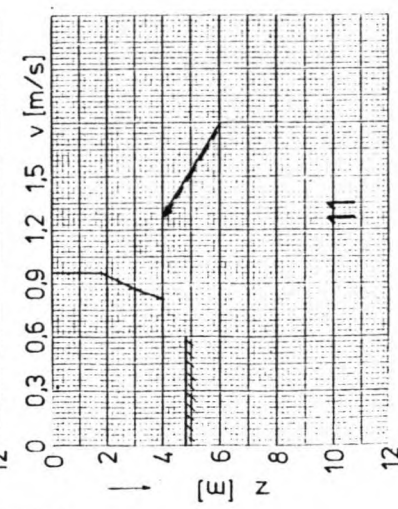
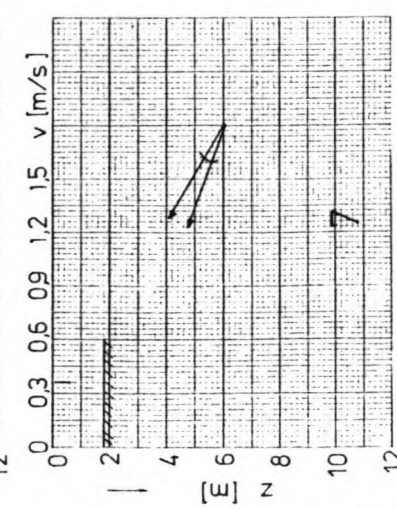
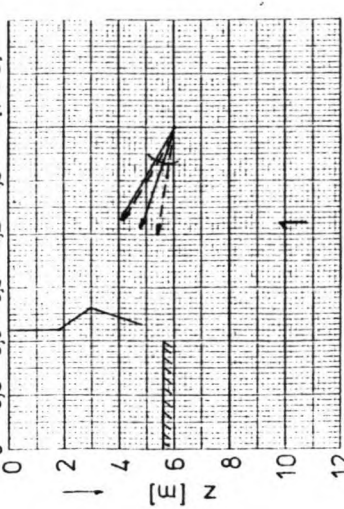
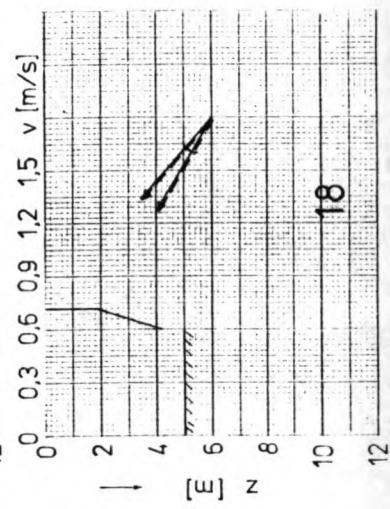
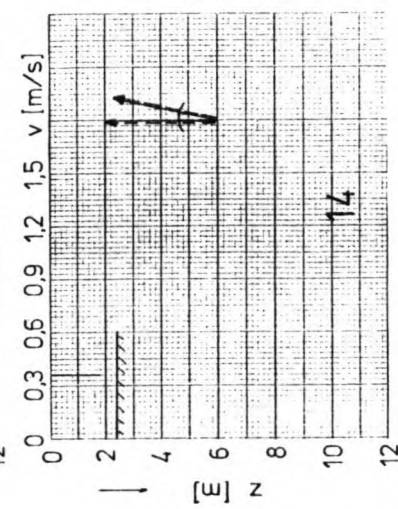
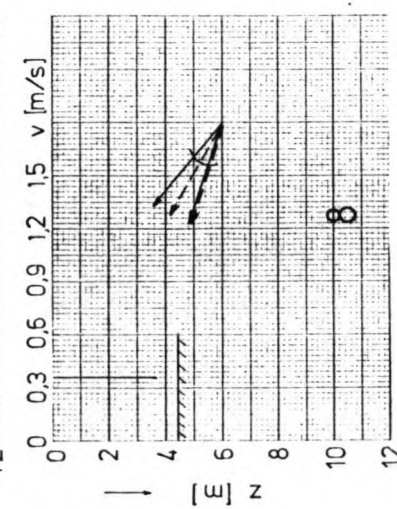
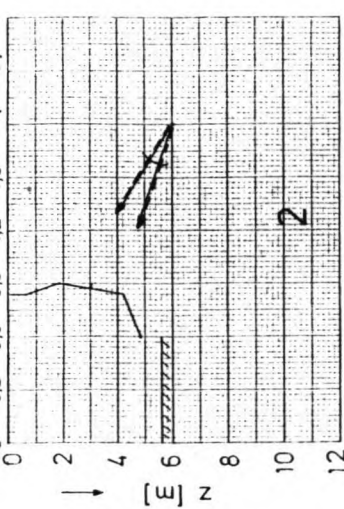
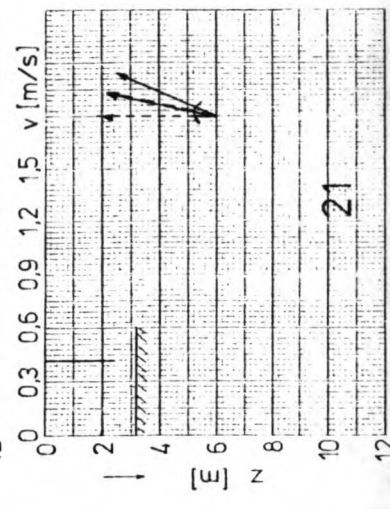
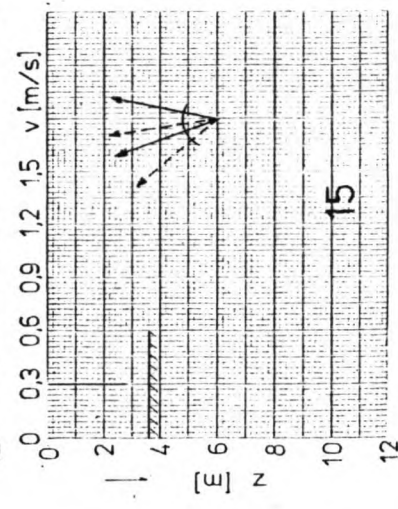
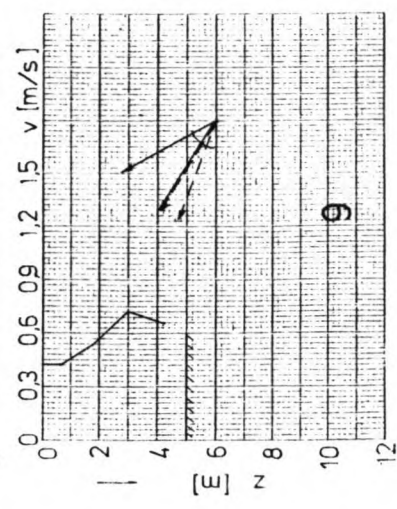
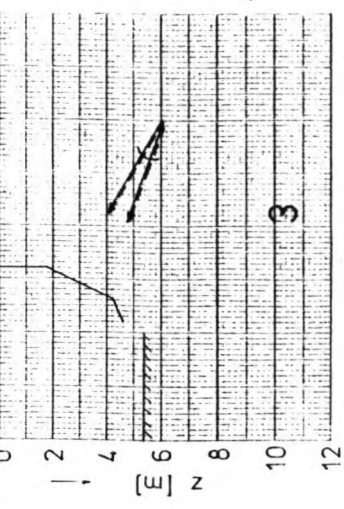
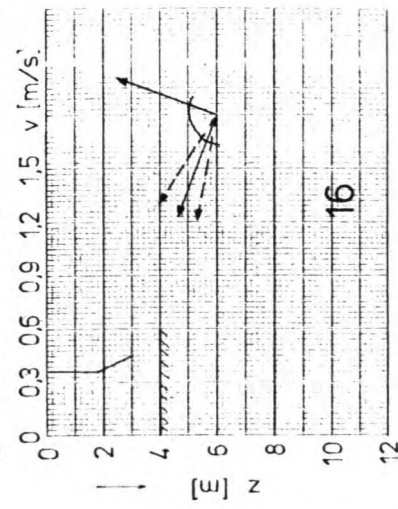
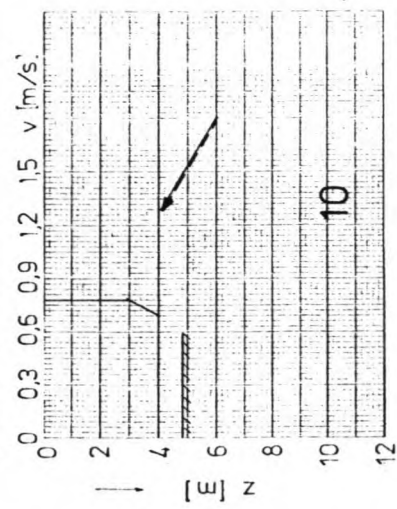
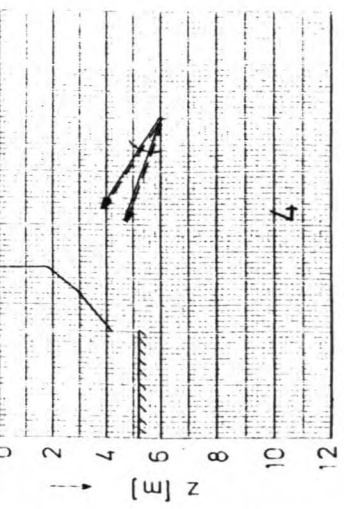
FIGUUR III.6



COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH - DELFT	SEPT - DEC 1983
STROOMMETINGEN	
VLOED	NAP +0.90 m
RICHTING	— — — — — BOVEN - - - - - ONDER
PROEENUMMER: T 19	

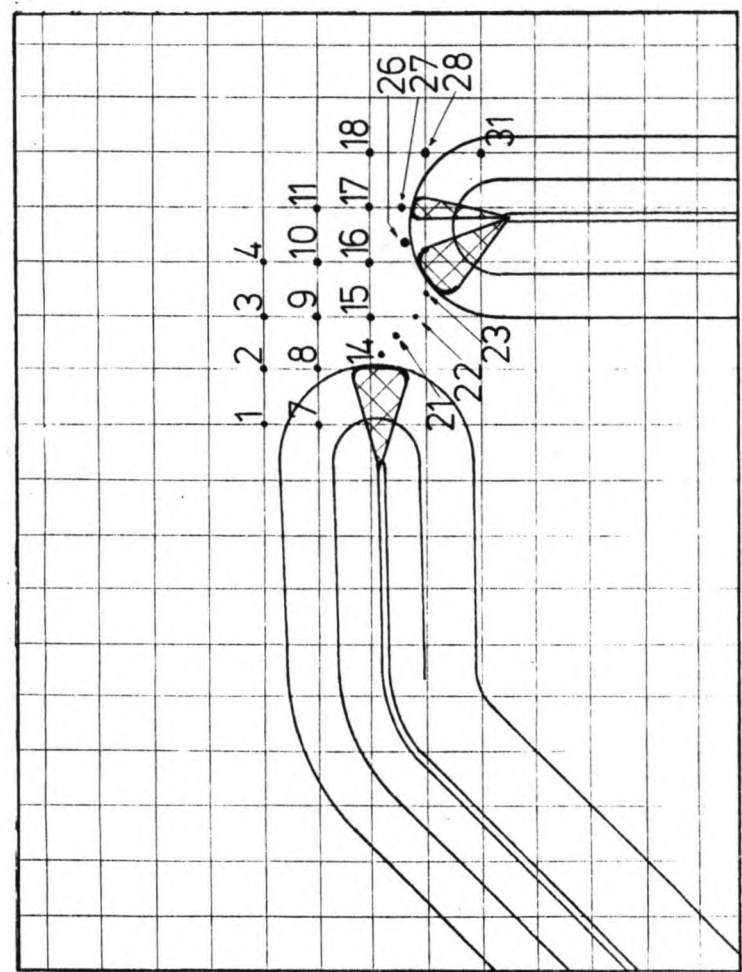
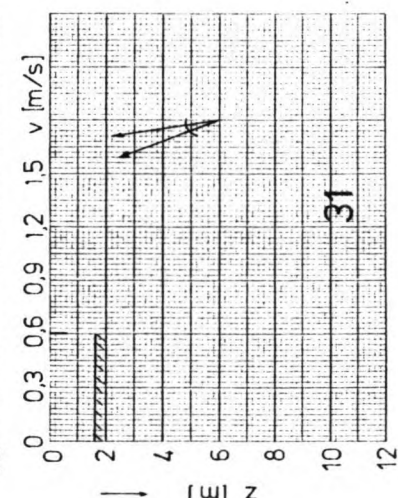
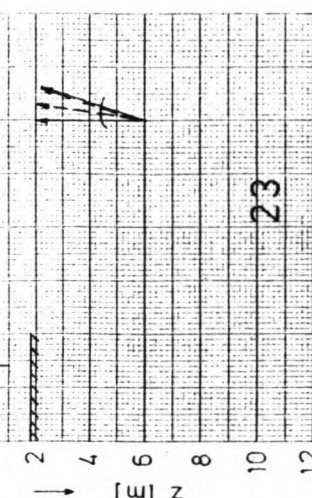
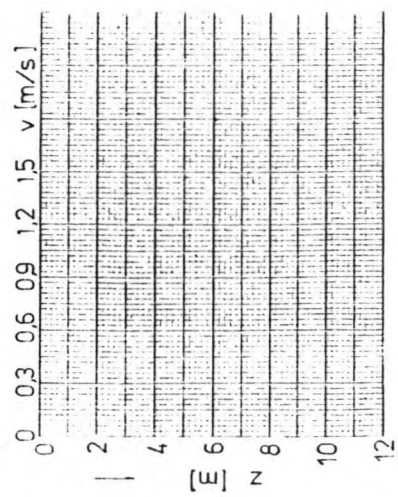
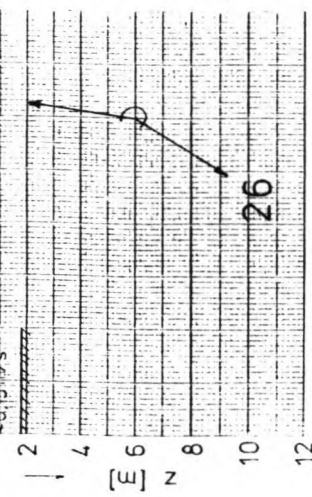
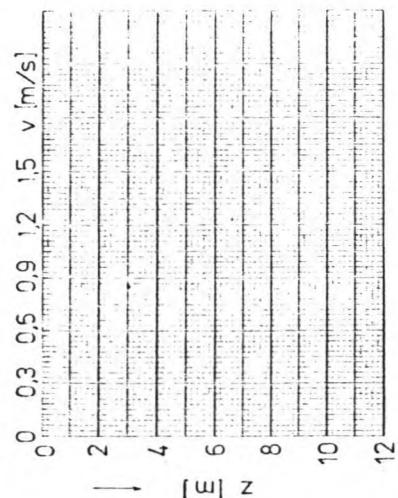
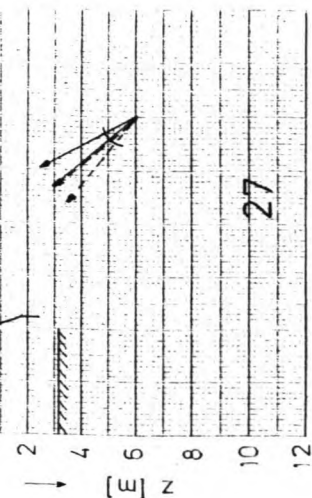


FIGUUR III.7



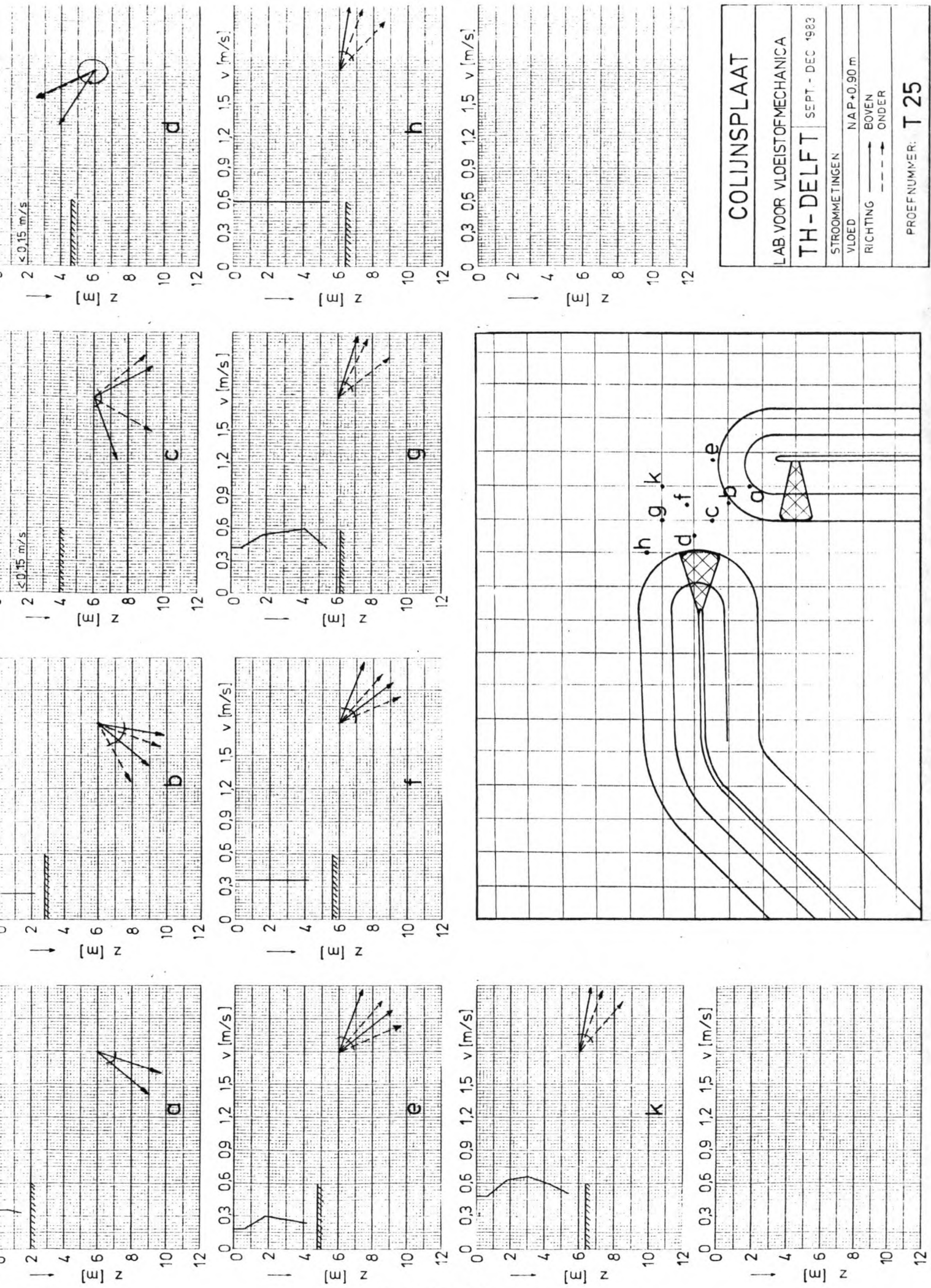
COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT	SEPT - DEC '593
STROMMETINGEN	
EB	
NAP - 0,15 m	
RICHTING	→ BOVEN --- ONDER
PROEFNUMMER: T 21 / 1	

FIGUUR III 8



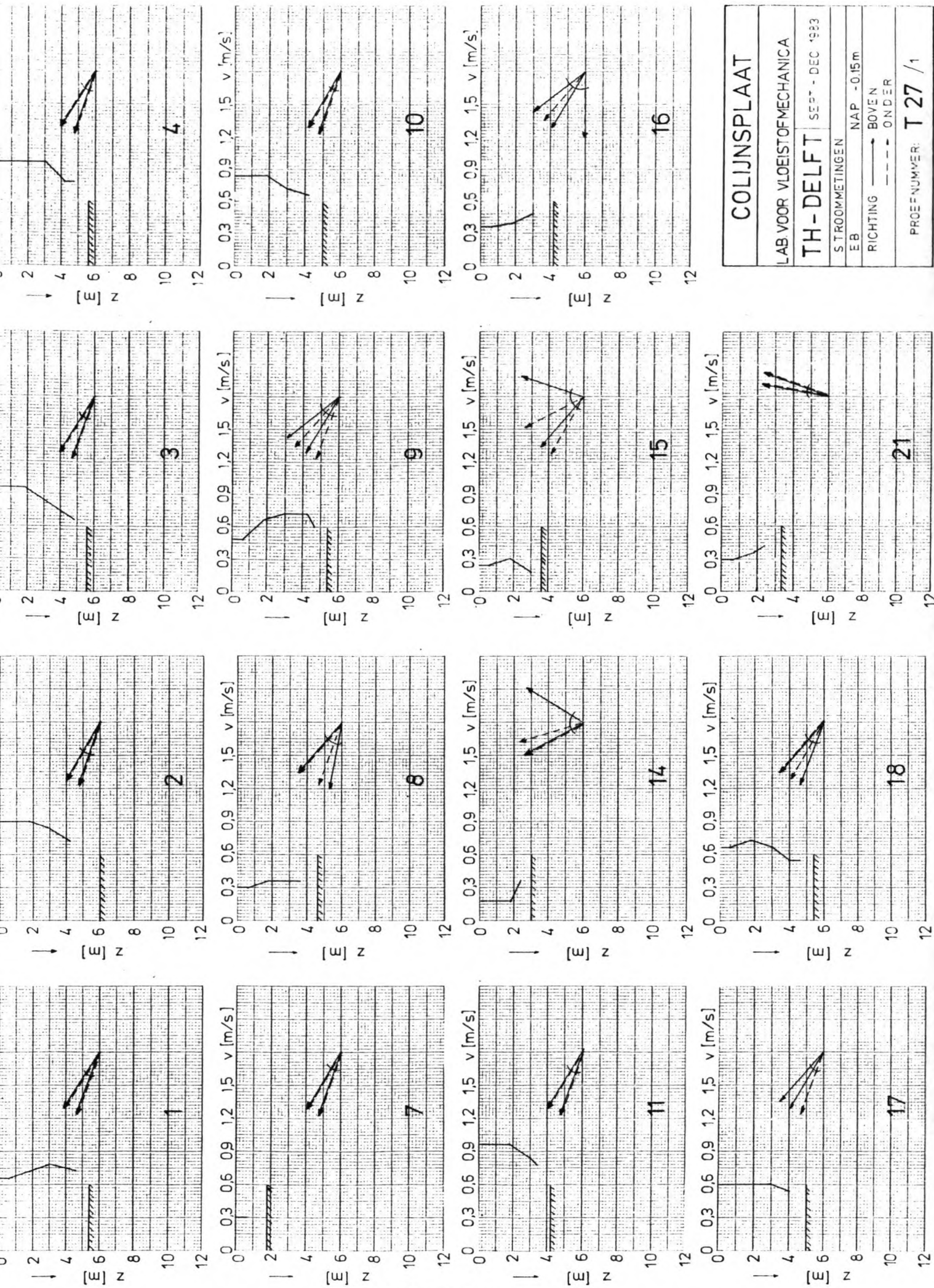
COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT SEPT - DEC 1983	
STROOMMETINGEN	
EB	NAP -0.15m
RICHTING	→ BOVEN --- ONDER
PROEFNUMMER:	T 21 / 2

FIGUUR III.9



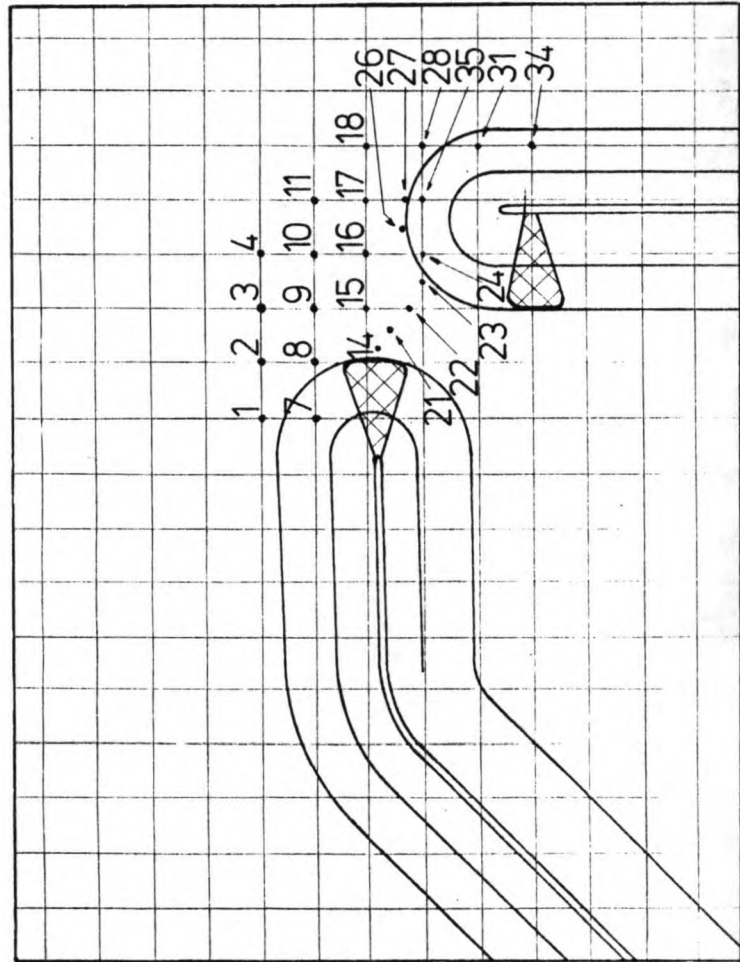
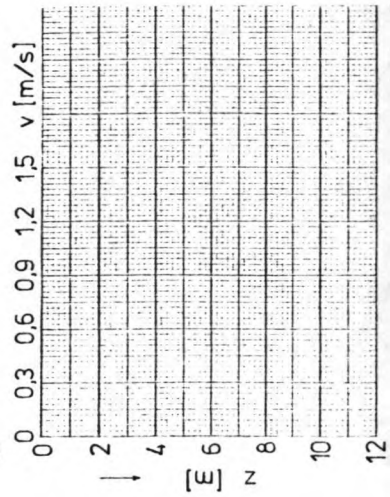
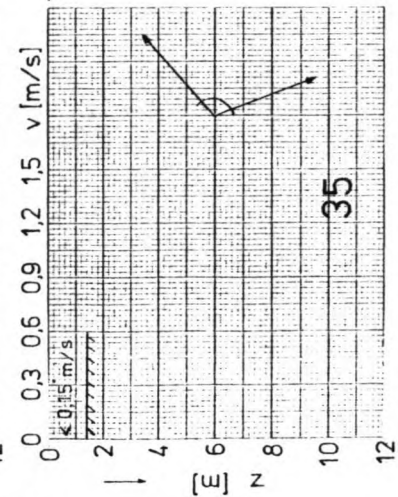
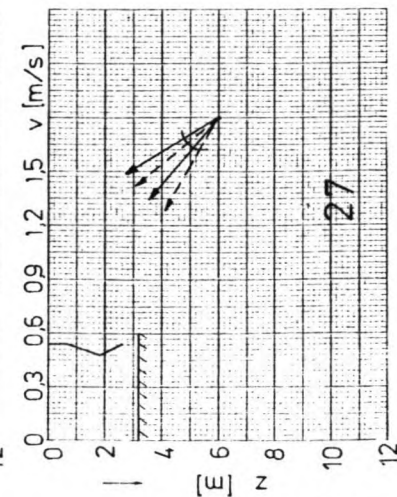
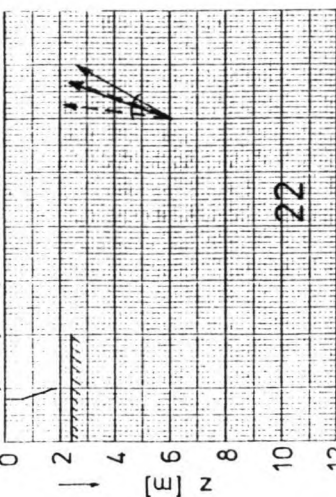
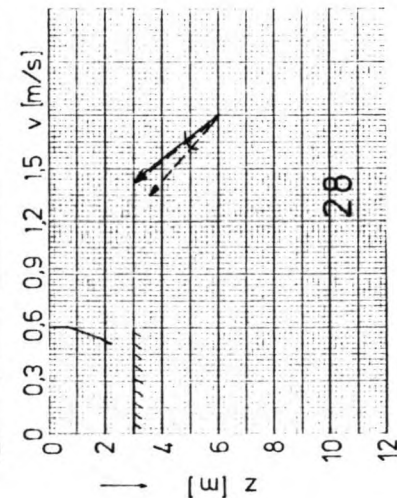
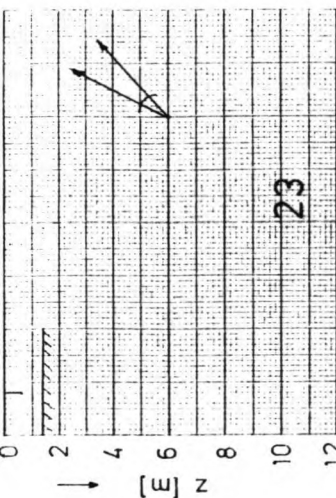
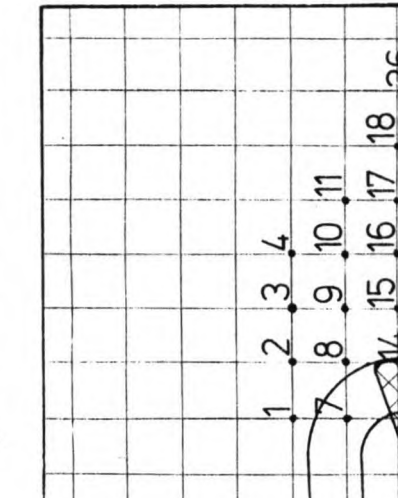
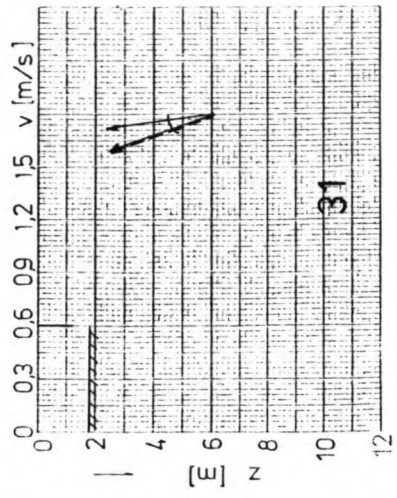
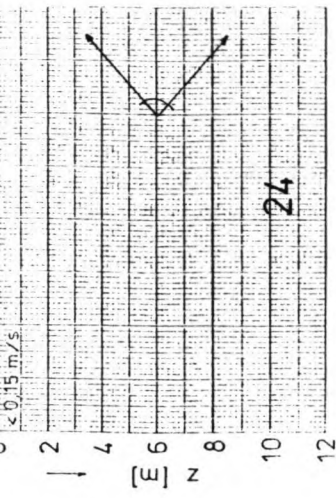
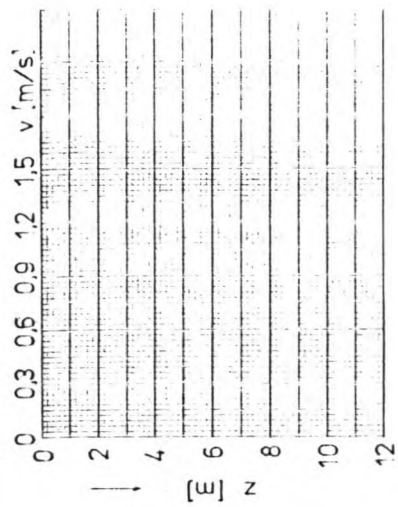
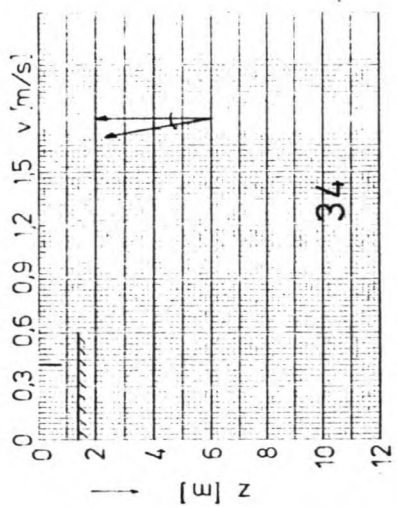
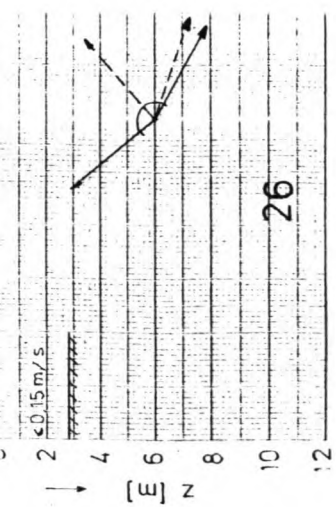
FIGUUR III.10

COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH - DELFT	SEPT - DEC 1983
STROOMMETINGEN	
VLOED	N.A.P.+0.90 m
RICHTING	BOVEN → ONDER - - - - -
PROEFNUMMER: T 25	



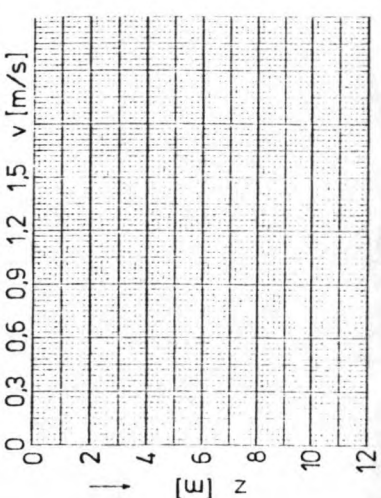
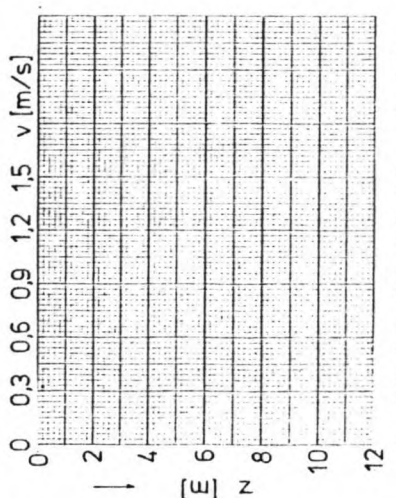
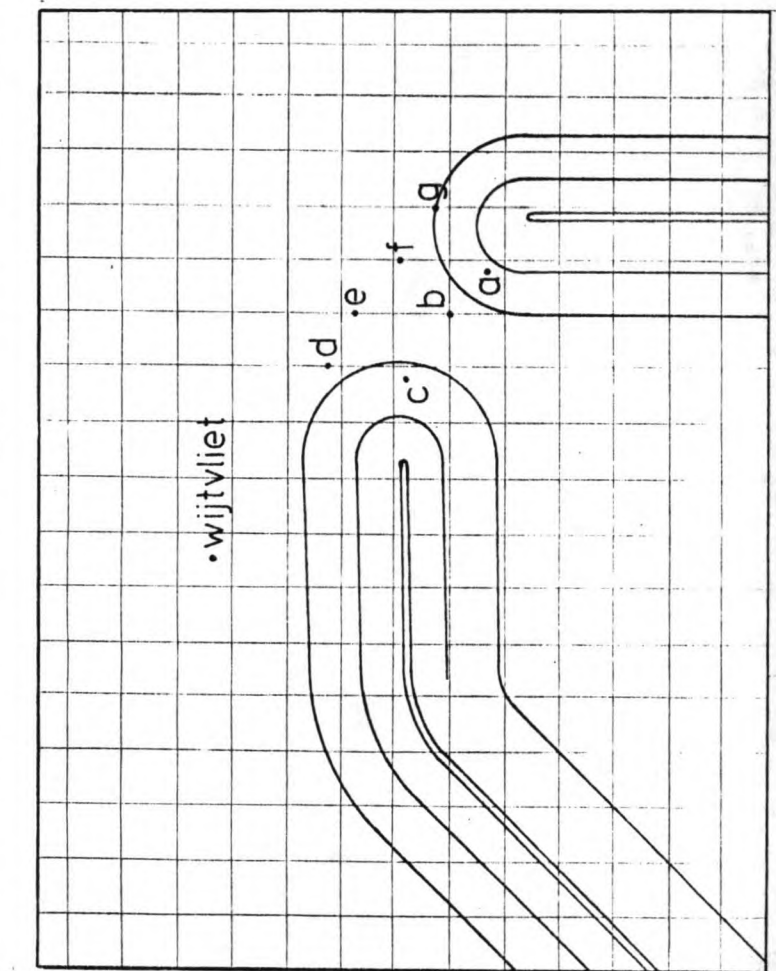
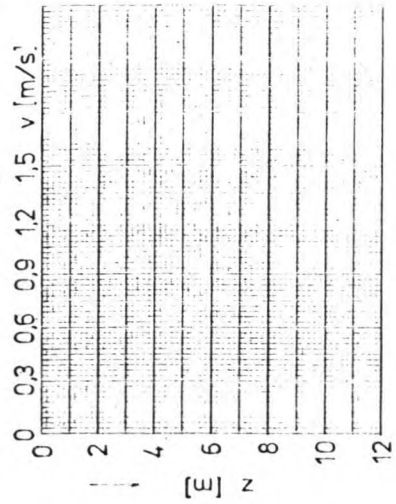
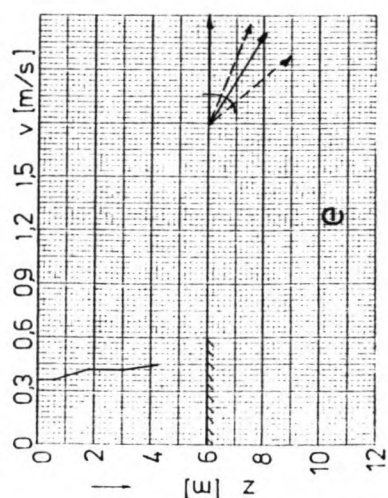
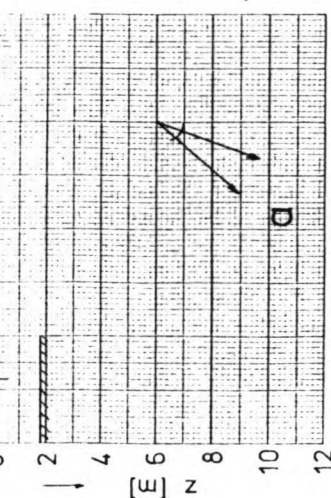
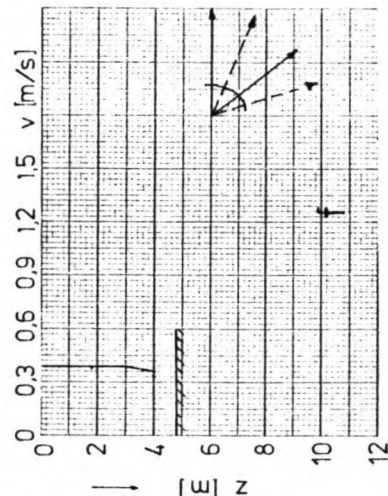
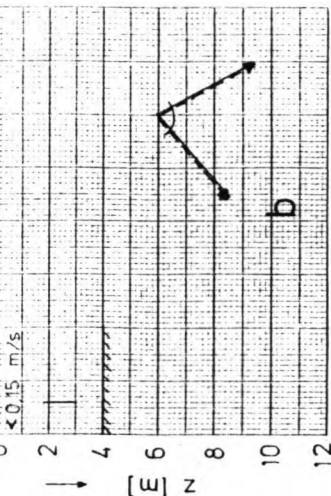
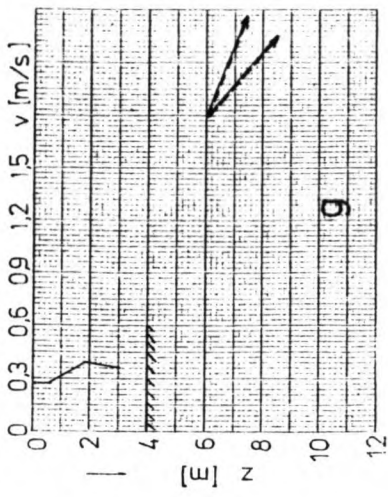
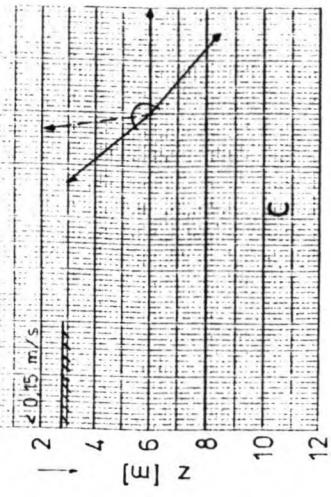
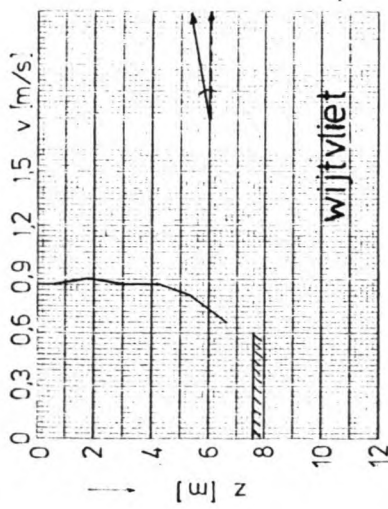
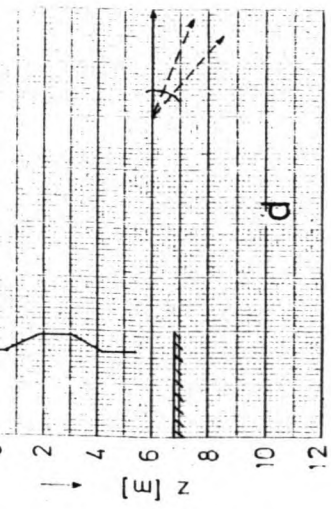
COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT SEP - DEC '83	
STROOMMETINGEN	NAP -0.15m
EB	RICHTING → BOVEN ----- ONDER
PROEFNUMMER: T 27 / 1	

FIGUUR III.11



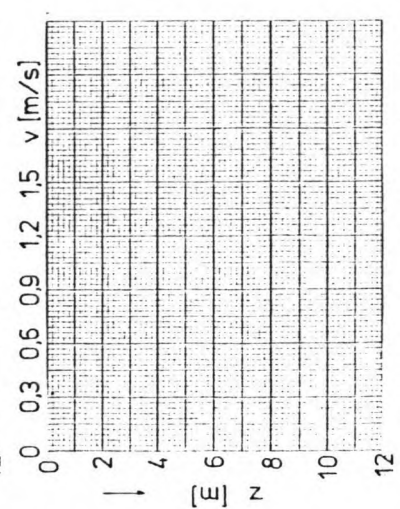
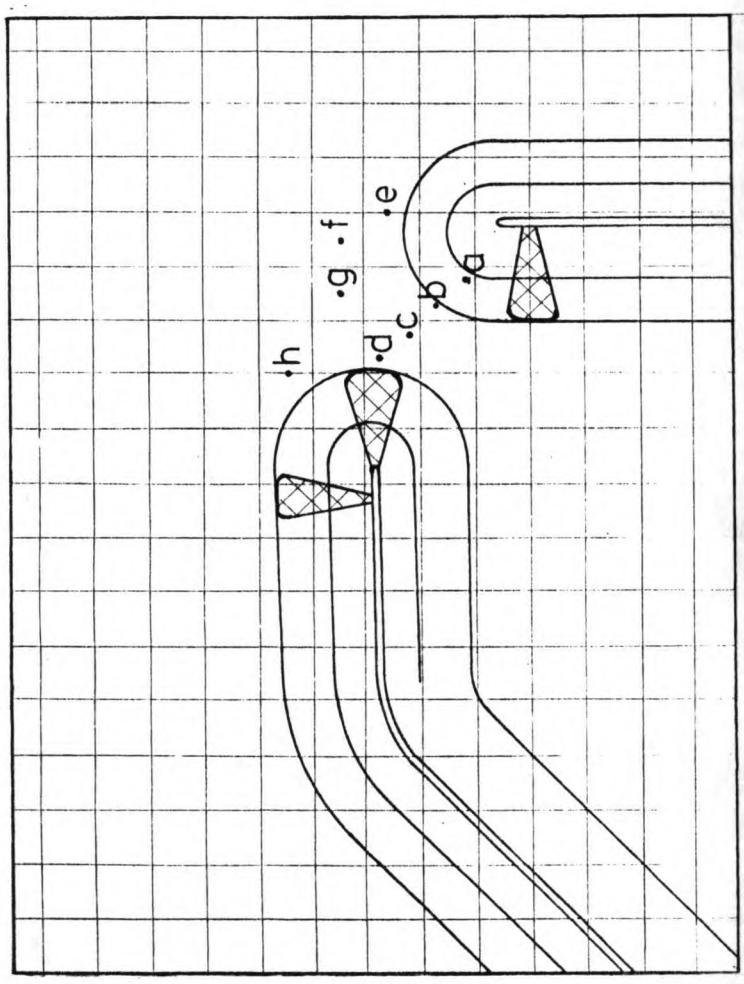
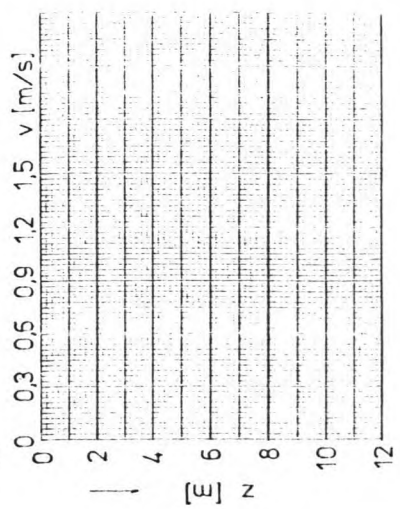
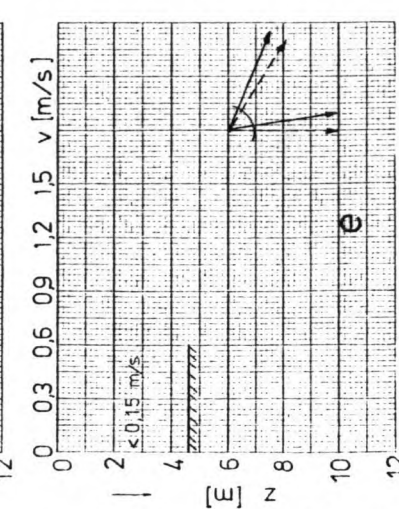
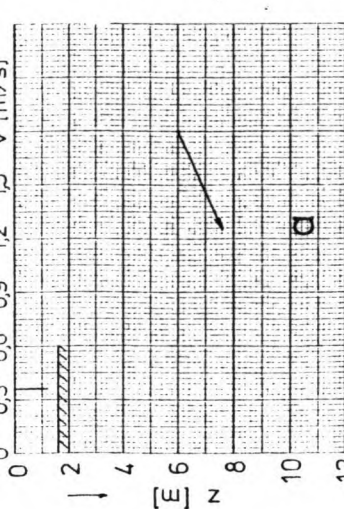
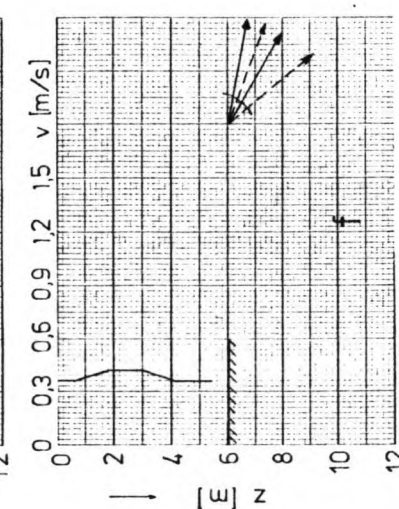
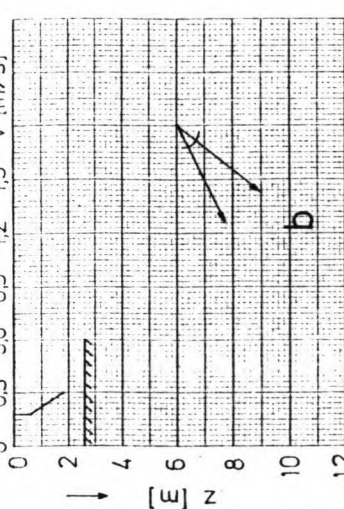
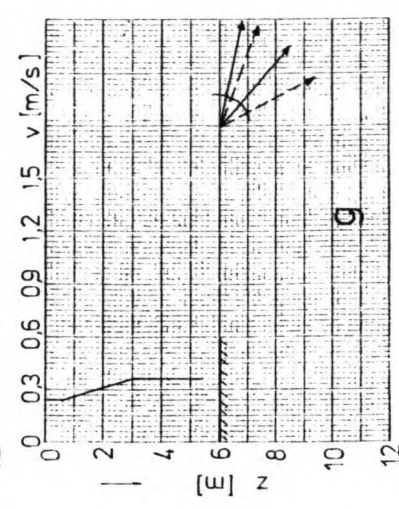
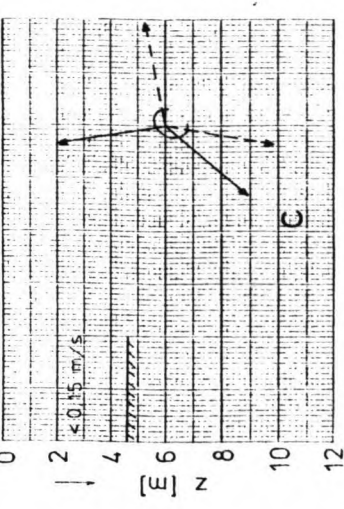
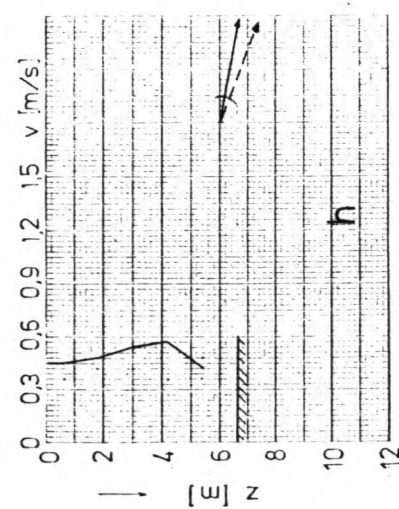
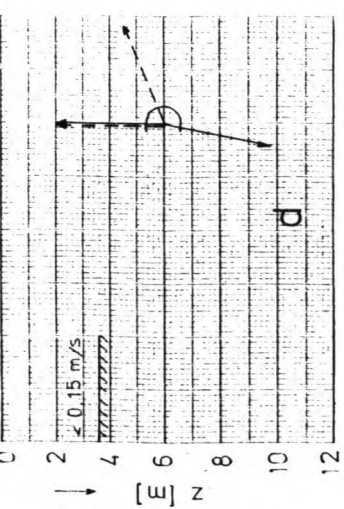
COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT SEPT - DEC 1988	
STROOMMETINGEN	
EB	NAP -0.15 m
RICHTING	BOVEN \longrightarrow ONDER \dashrightarrow
PROEVENUMMER:	T 27 / 2

FIGUUR III 12



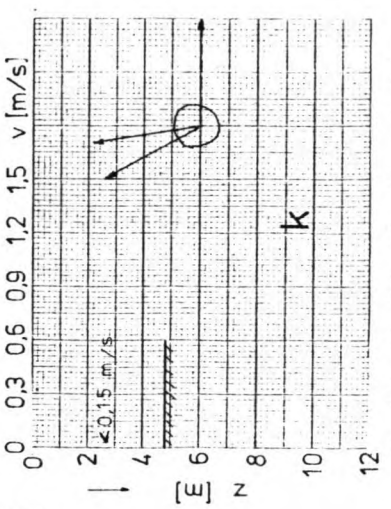
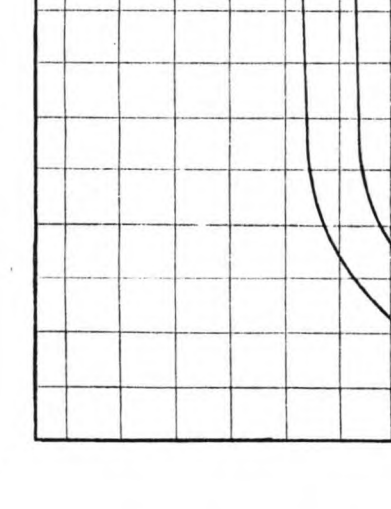
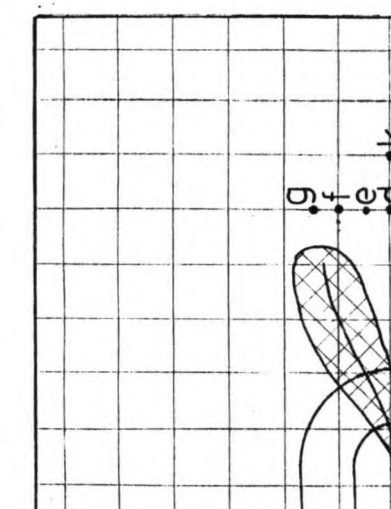
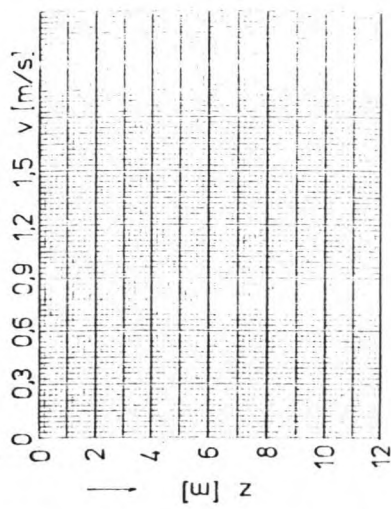
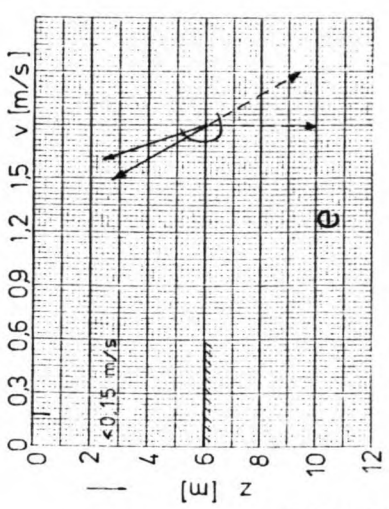
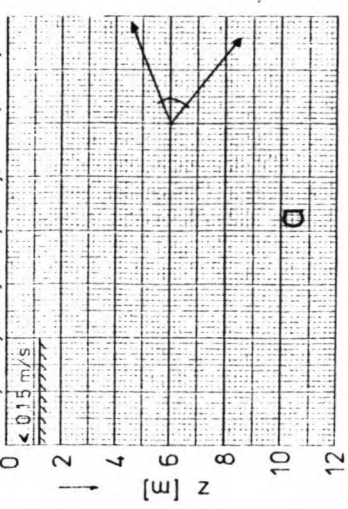
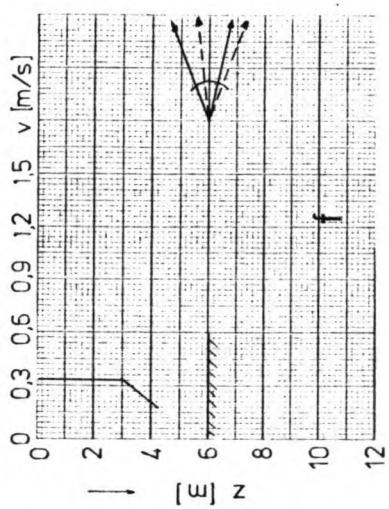
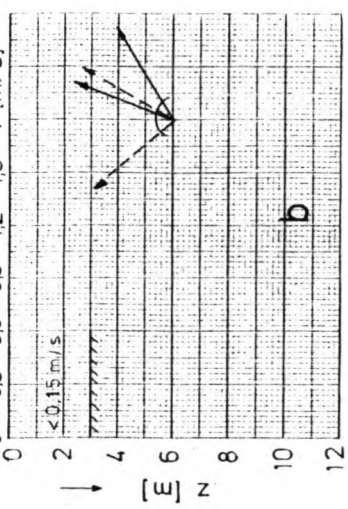
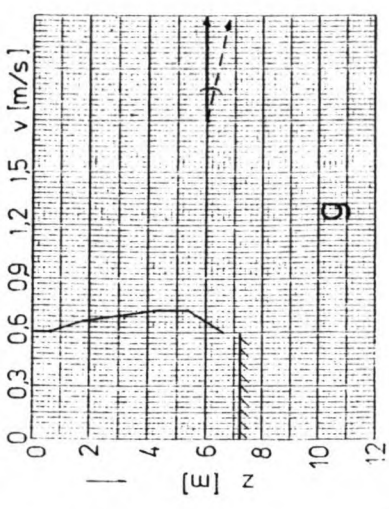
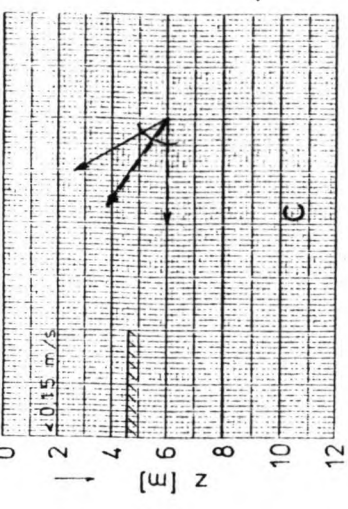
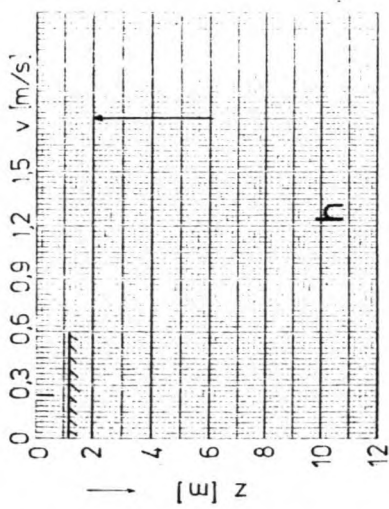
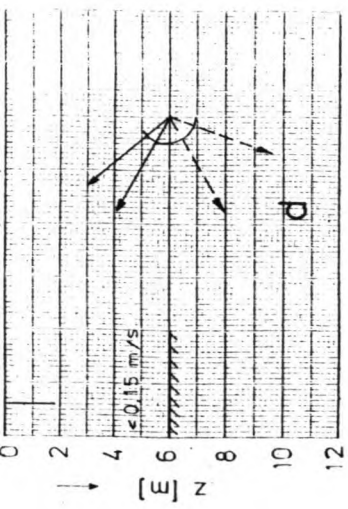
COLIJNSPLAAT	
LAB. VOOR VLOEISTOFMECHANICA	
TH - DELFT SEPT - DEC '53	
STROOMMETINGEN	NAP + C.30 m
VLOED	BOVEN
RICHTING	ONDER
PROEFNUMMER: T 29	

FIGUUR III 13

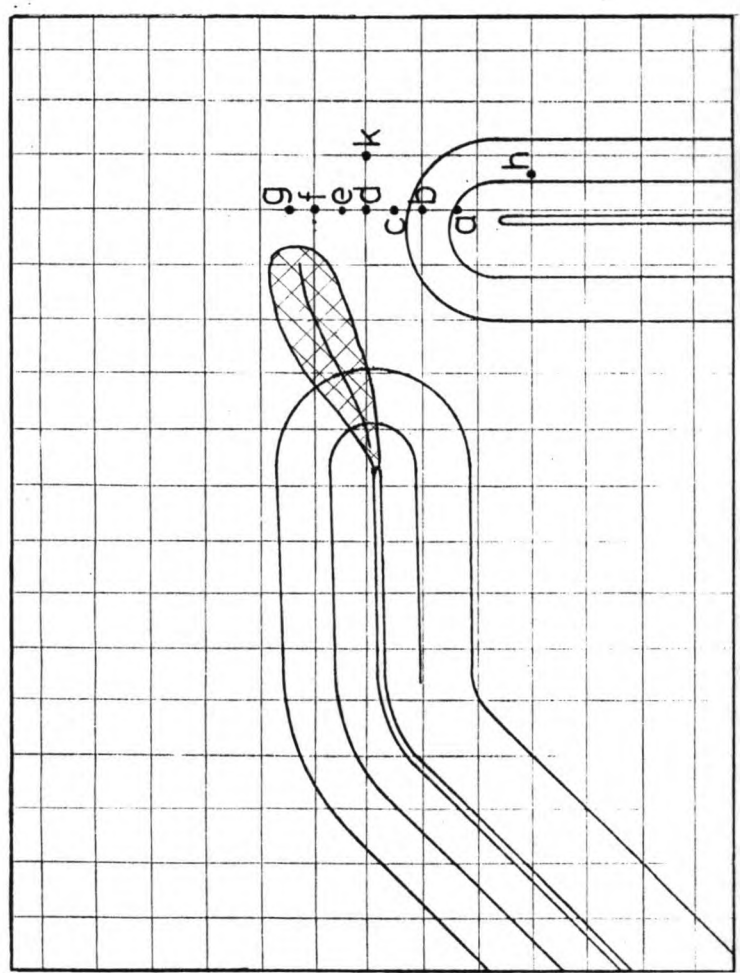


COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH - DELFT	SEPT - DEC 1983
STROOMMETINGEN	
VLOED	MAP +0,96 m
RICHTING	BOVEN
	ONDER
PROEENUMMER:	T 31

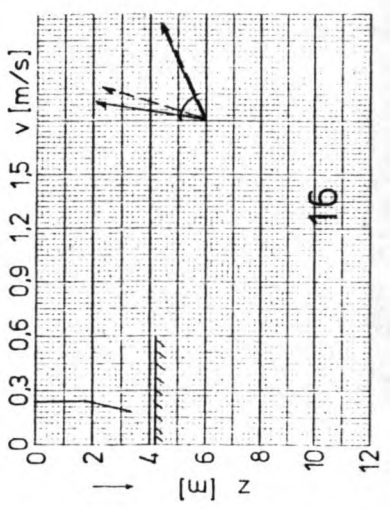
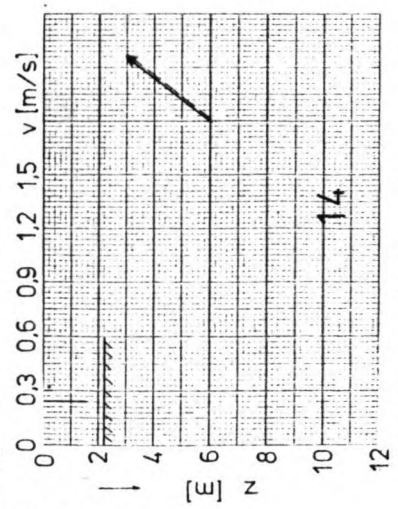
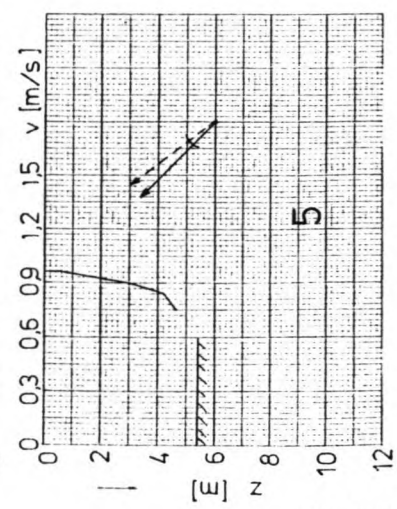
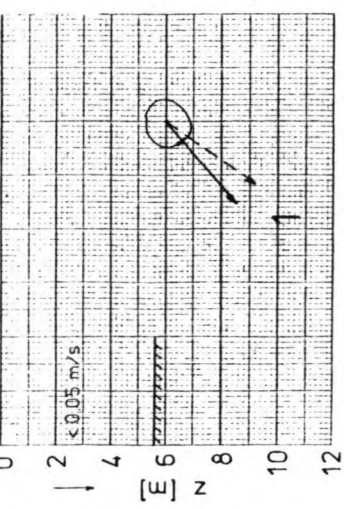
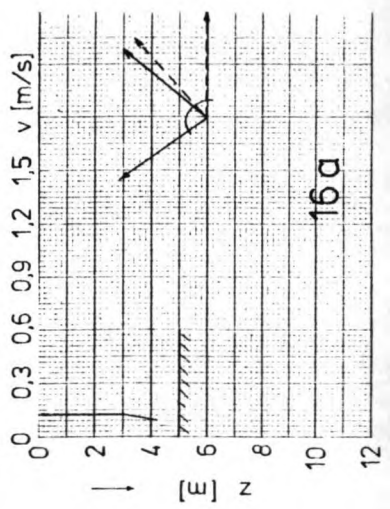
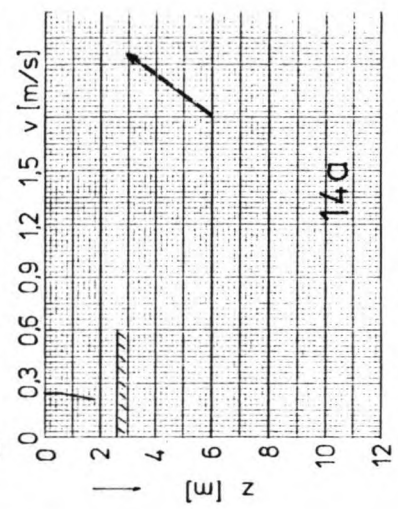
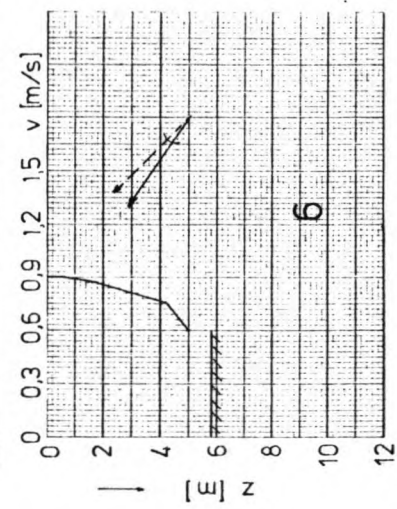
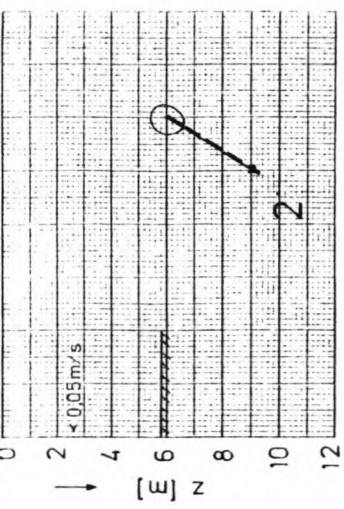
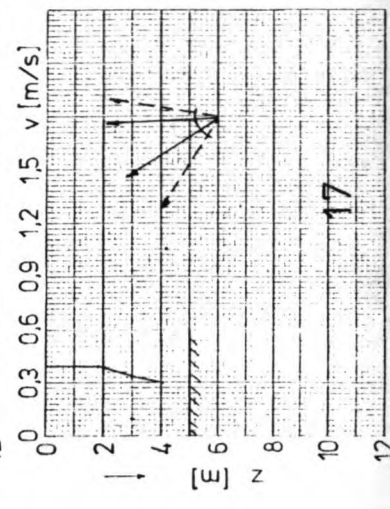
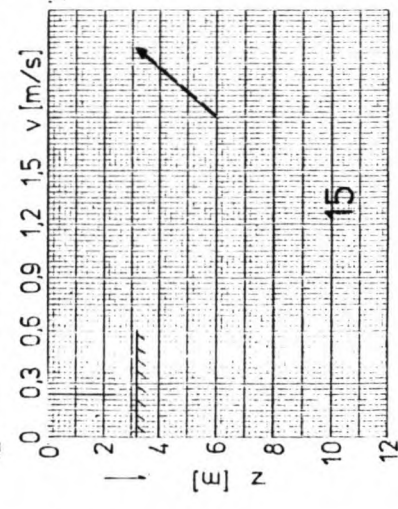
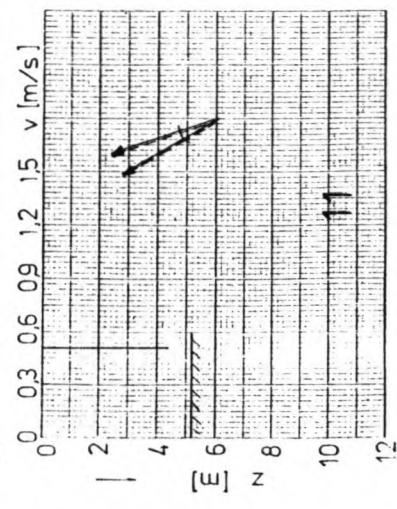
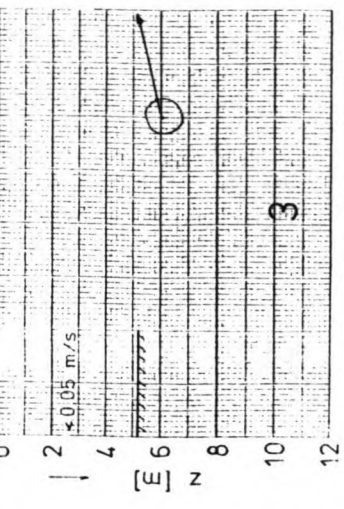
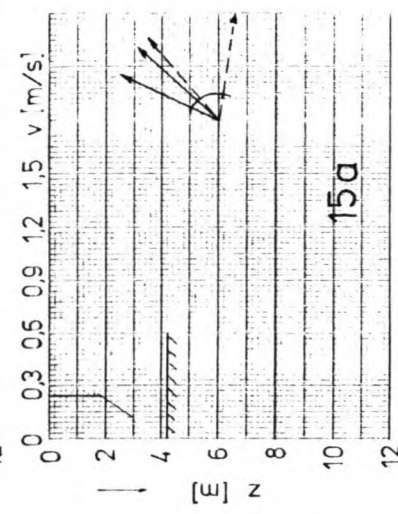
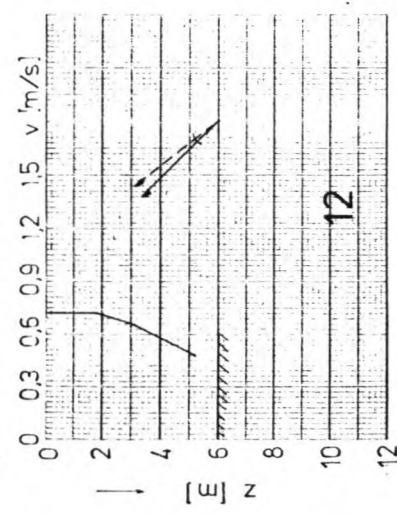
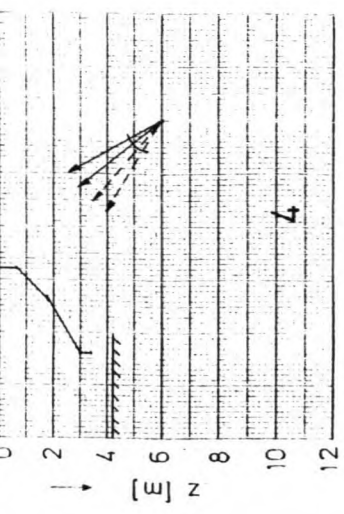
FIGUUR III.14



COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT	SEPT - DEC '93
STROOMMETINGEN	
VLOED	NAP +0.90m
RICHTING	BOVEN
	ONDER
PROEFNUMMER:	T 32

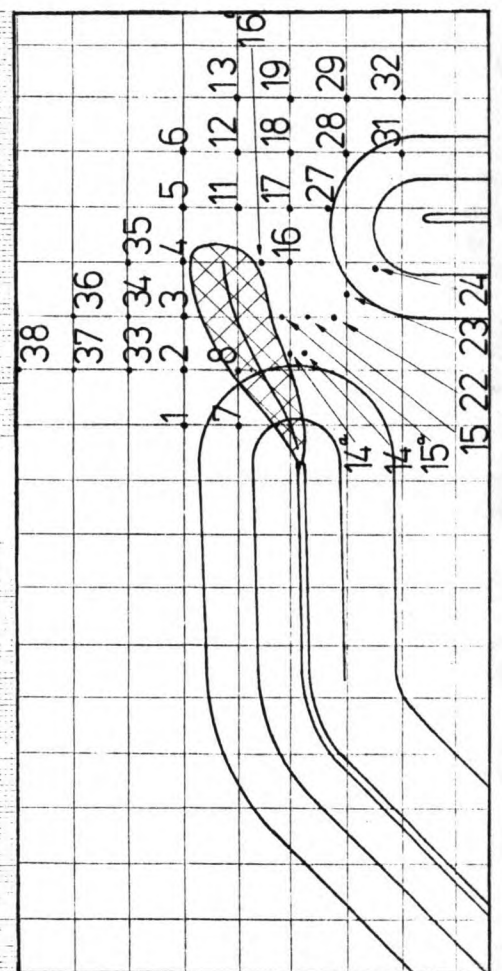
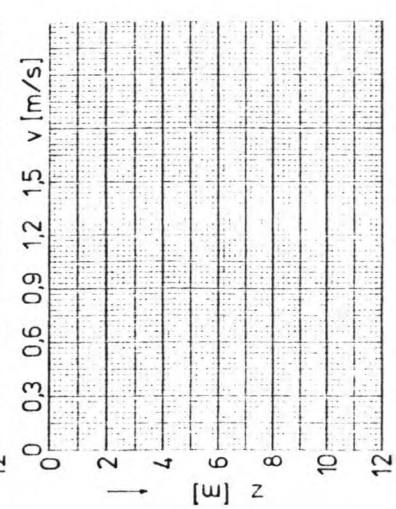
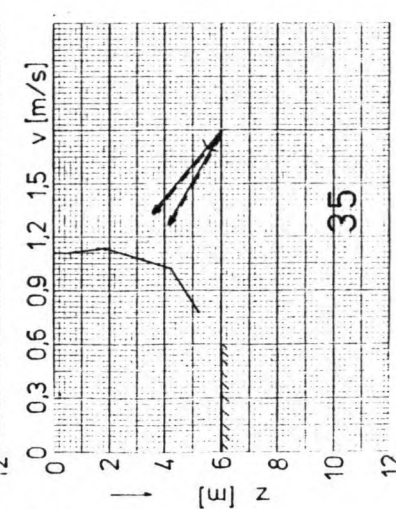
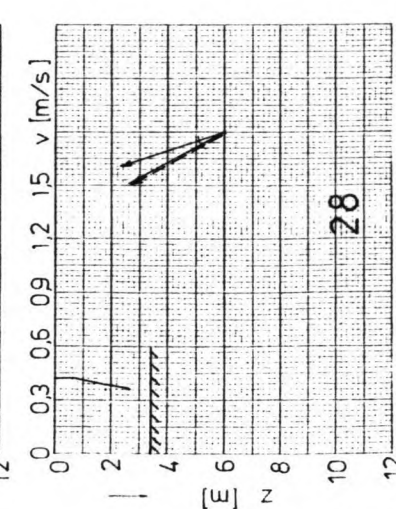
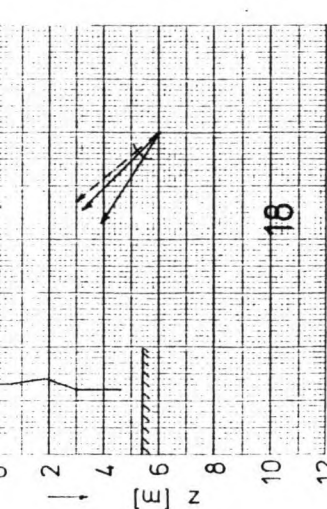
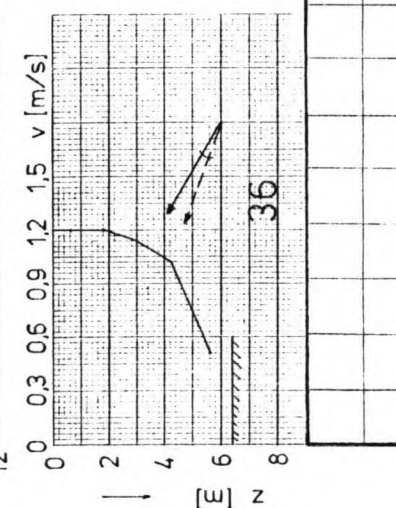
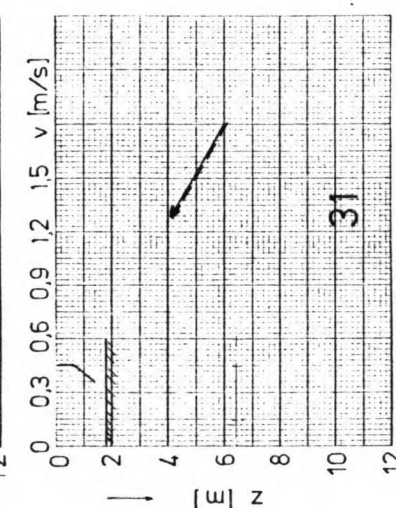
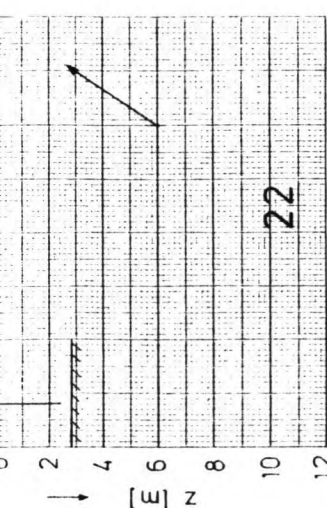
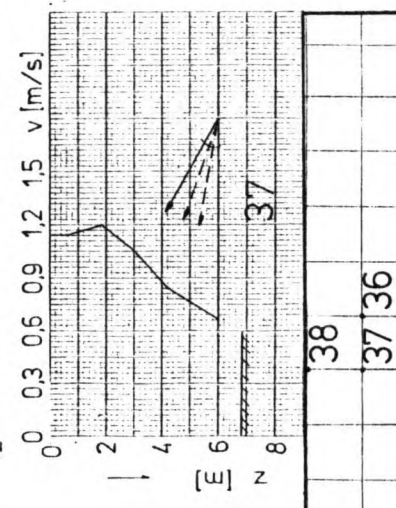
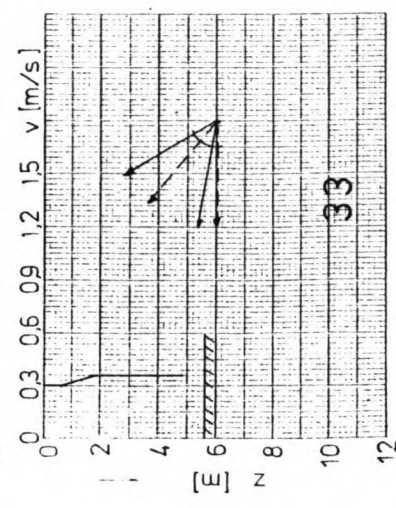
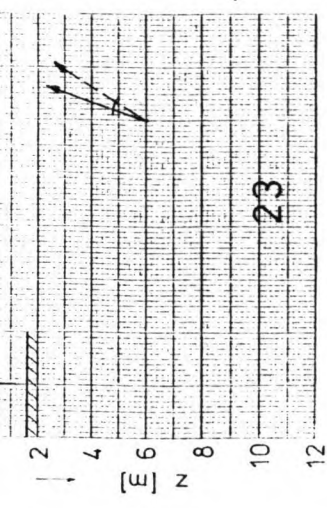
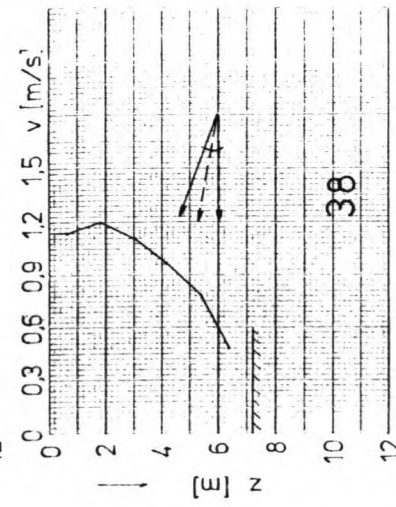
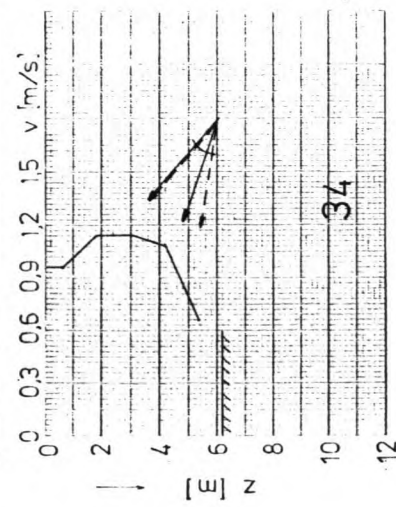
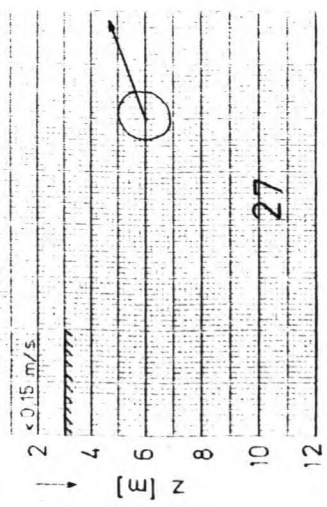


FIGUUR III.15



COLIJNSPLAAT	
LAB. VOOR VLOEISTOFMECHANICA	
TH-Delft SEPT. - DEC. 1983	
STROOMMETINGEN	
EB	NAP - 0,15m
RICHTING	→ BOVEN --- ONDER
PROEENUMMER: T 34 1	

FIGUUR III 16

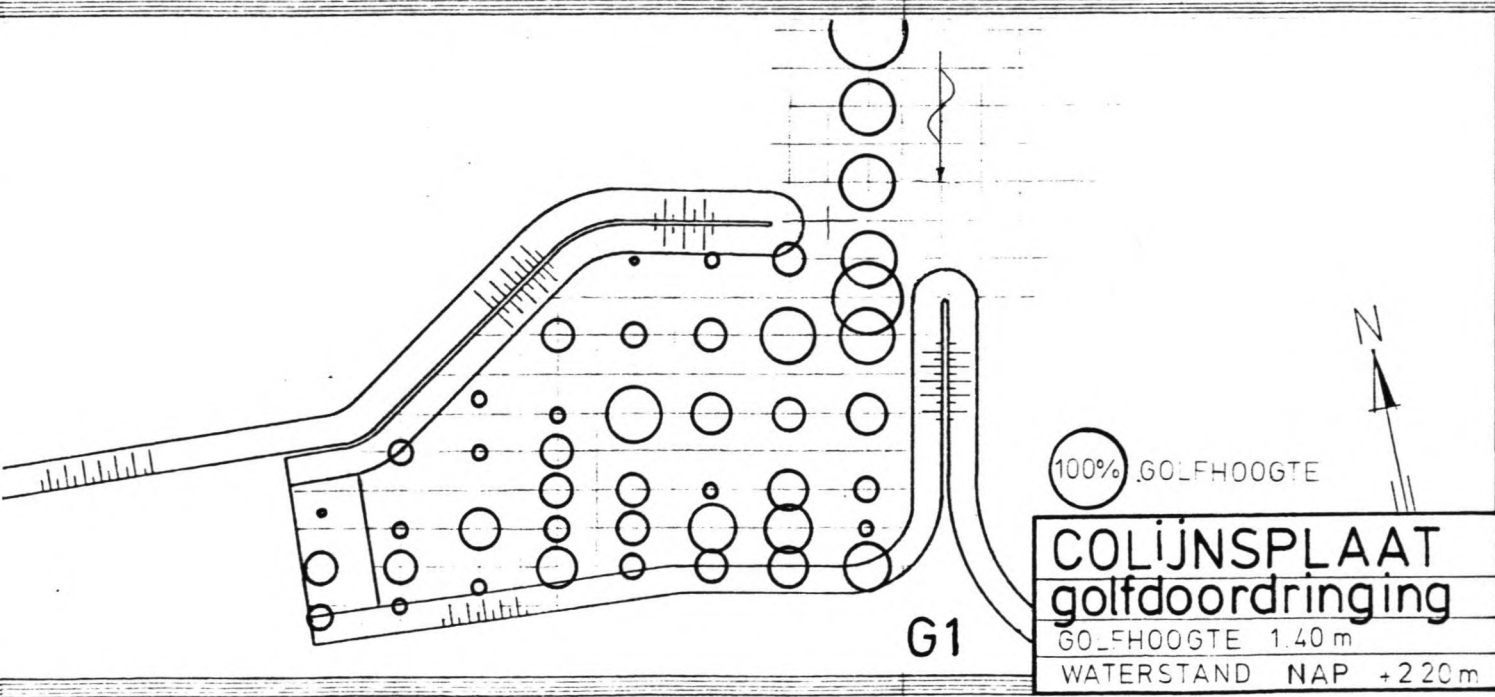
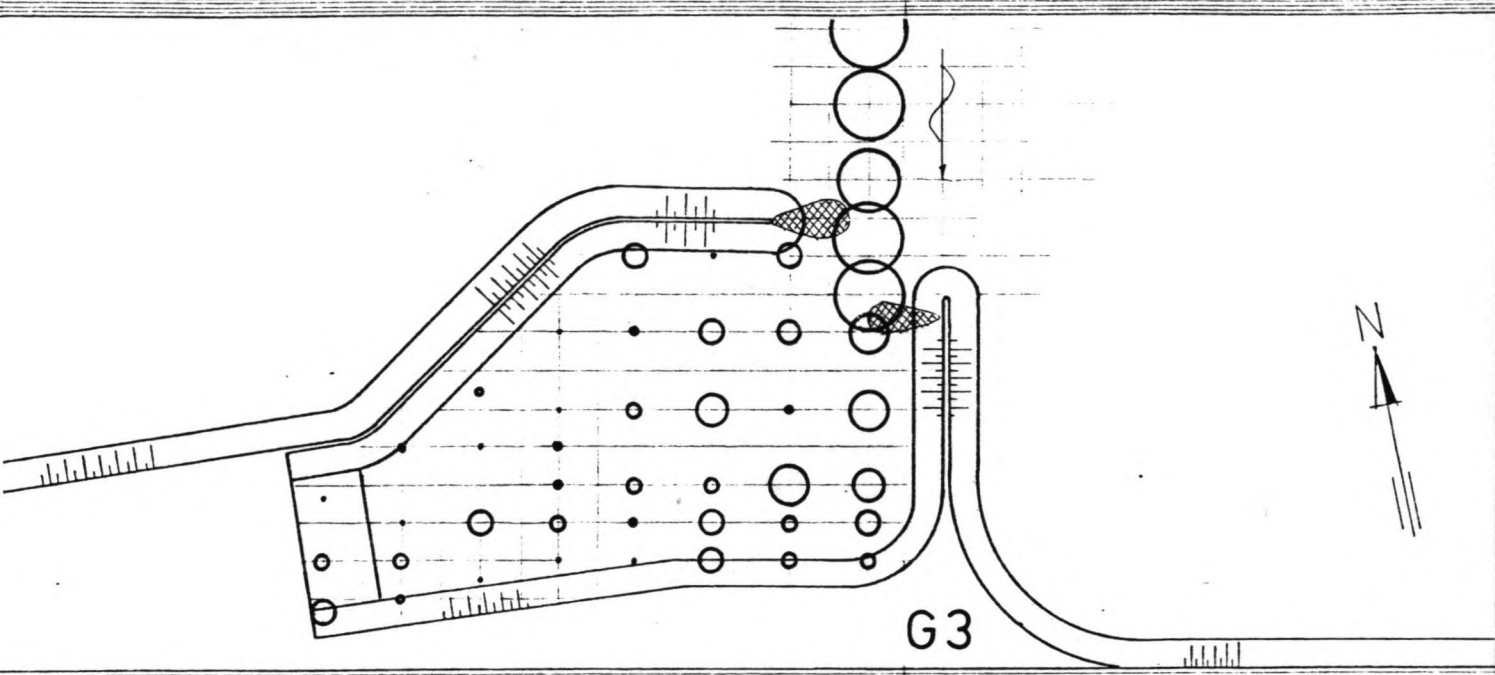
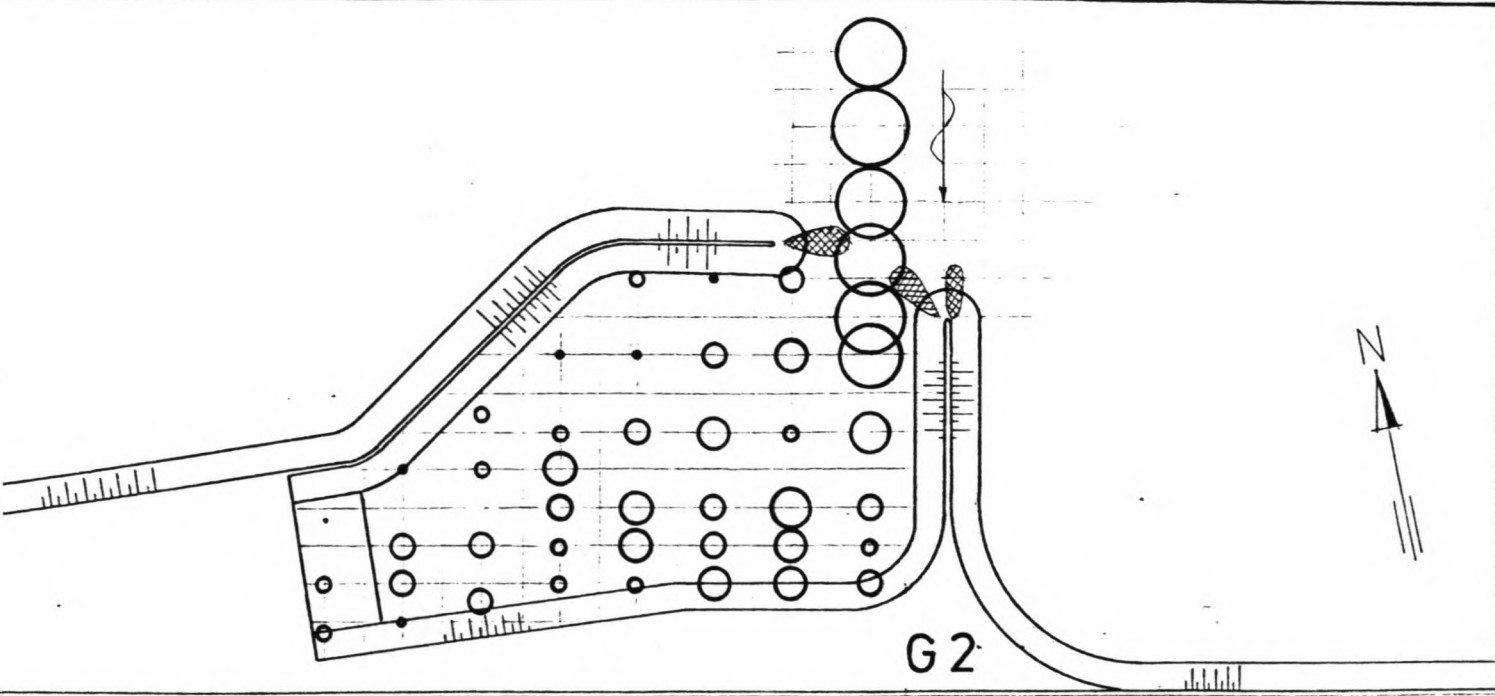


COLIJNSPLAAT	
LAB VOOR VLOEISTOFMECHANICA	
TH-DELFT	SEPT - DEC '93
STROOMMETINGEN	
EB	NAP - 0.15 m
RICHTING	→ BOVEN --- ONDER
PROEFNUMMER: T34 / 2	

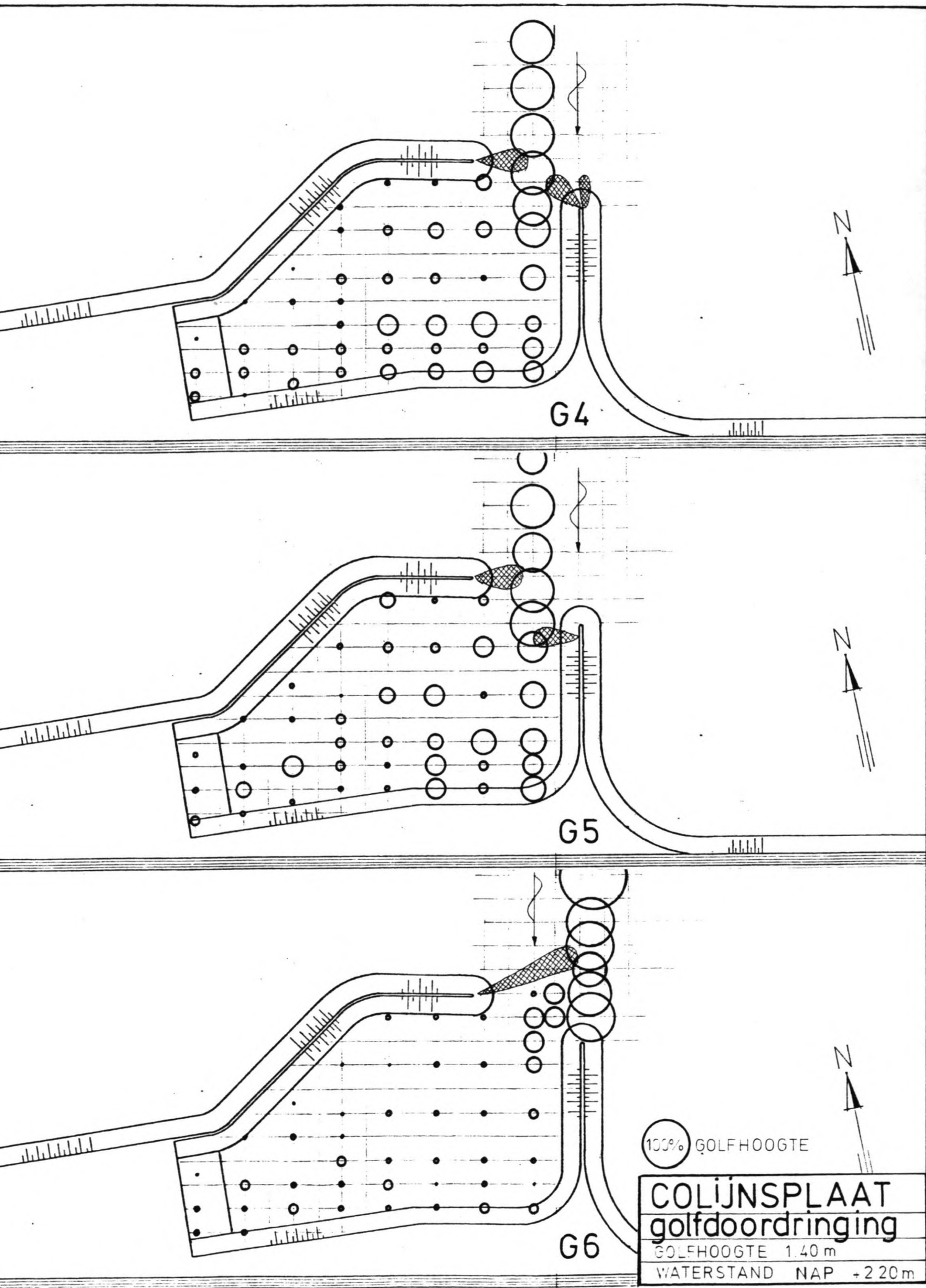
FIGUUR III.17

BIJLAGE IV

GOLFDOORDRINGING



FIGUUR IV.1



FIGUUR IV.2

